MFAS-An Online Shopping System



By:

Mariam Farooqi 26849 Fatima Mushtaq 22529 Saba Noor 23746 Aleesha Malik 26359

Faculty of Computing

Riphah International University, Islamabad Fall 2020

A Dissertation Submitted To

Faculty of Computing, Riphah International University, Islamabad As a Partial Fulfillment of the Requirement for the Course Software Requirements Engineering Bachelor of Science in Software Engineering



(Shopping the way you like it)

Faculty of Computing
Riphah International University, Islamabad

Dedication/Acknowledgment

This report is dedicated to my parents who always cooperated and helped me in completing this project. This project is successful only because of their support.

Abstract

Software systems are part of our everyday life and their need is increasing day by day so in this report, we have stated all the documents which will lead us in building a successful software system that will ultimately meet user needs.

This report consists of all the features of our system which are important for functioning of system. Apart from this, this report highlights in detail vision document that provides a high-level scope and purpose of system .It not only defines the problem, and solutions of system but also specify user needs, elaborates the need of stakeholders and different risk factors that are associated with system. One part of report includes the use case model and its specification which provides deep understanding of goals, tasks, and requirements of system. Furthermore, we have written all the features of system and mapped requirements against these features. These requirements are very important because further development of system depends upon these requirements. Another section of the report includes Requirements Traceability which is very important because it helps us to create a flow that connects software requirements to product requirements and test cases to software requirements. We have made a requirement traceability matrix and test cases table for mapping all the software requirements, by doing so correct requirements are built and tested hence risks and errors are minimized. The last segment of this report comprises of Supplementary Specification document that captures all the functional as well as non-functional requirements of system, focuses on design constraints, and contains other necessary information for verification and maintenance of the system which overall provides a better understanding of our system.

This whole report provides a guide way for the development of a software system.

Table of Contents

LITERATURE SURVEY TABLE	13
ETTERNIT CHE SCH (ET TIBEE	
BUSINESS MODELS	15
VISION DOCUMENT	18
1. INTRODUCTION	
1.1 PURPOSE	
1.2 SCOPE	
1.3 DEFINITIONS, ACRONYMS, AND ABBREVIATION	
1.3.1. Acronyms	
1.3.2. Definition	
1.4. REFERENCES	
1.5 Overview	
2. POSITIONING	23
2.1 PROBLEM STATEMENT	23
2.2 PRODUCT POSITION STATEMENT	24
3. STAKEHOLDER AND USER DESCRIPTIONS	24
3.1 Stakeholder Summary	
3.2 USER SUMMARY	
3.3 USER ENVIRONMENT	_
3.4 Stakeholder Profiles	
3.4.1 System Analyst	
3.4.2 Project Manager	
3.4.3 Requirement Specifier	
3.4.4 Software Architect	
3.4.5 Technical Reviewer	
3.5 User Profiles	
3.5.1 Registered customer	
3.5.2 Admin	
3.5.3 Visitor	
3.6 KEY STAKEHOLDER OR USER NEEDS	
3.7 ALTERNATIVES AND COMPETITION	
3.7.1 Daraz	35
3.7.2 Alibaba	35
3.7.3 AliExpress	35
3.7.4 Amazon	35
3.7.5 OLX	36
3.7.6 <i>Metro</i>	36
3.7.7 E-bay	36
4. PRODUCT OVERVIEW	36
4.1 Product Perspective	36
4.2 Summary of Capabilities	
4.3 ASSUMPTIONS AND DEPENDENCIES	
5. PRODUCT FEATURES	38
6 CONSTRAINTS	40

7.	QUALITY RANGES	40
8.	PRECEDENCE AND PRIORITY	41
9.	DOCUMENTATION REQUIREMENTS	42
9	1 USER MANUAL	42
9	2 Online Help	
9	3 INSTALLATION GUIDES, CONFIGURATION, AND READ ME FILE	42
9.4.	A FEATURE ATTRIBUTES	43
-	4.1. A.1 Status	
	4.2. A.2 BENEFIT	
	4.3. A.3 EFFORT	
	4.4. A.4 RISK	
-	4.6. A.6 TARGET RELEASE	
	4.7. A.7 ASSIGNED TO	
9	4.8. A.8 REASON	51
US	CASE MODELING	52
1.	ID: UC-01	54
2.	ID: UC- 02	56
3.	ID: UC- 03	57
4.	ID: UC- 04	59
5.	ID: UC- 05	60
6.	ID: UC- 06	61
7.	ID: UC- 07	62
8.	ID: UC- 8	63
9.	ID: UC-9	64
10.	ID: UC- 10	64
11.	ID: UC- 11	65
12.	ID: UC- 12	66
13.	ID: UC- 13	67
14.	ID: UC- 14	67
15.	ID: UC- 15	68
FE	ATURES AND SOFTWARE REQUIREMENTS	71
RE	QUIREMENTS TRACEABILITY MATRIX	84
	T CASES	
SU	PLEMENTARY SPECIFICATION DOCUMENT	. 125
1.	INTRODUCTION	. 127
1	1. Purpose	. 127
_	2. Scope	
1	3. DEFINITIONS, ACRONYMS, AND ABBREVIATIONS	. 128

1.3.	1. Acronyms:	128
1.3.2	2. Definitions:	128
1.4.	References	
1.5.	Overview	129
2. USA	ABILITY	129
2.1.	OPERABILITY	129
2.2.	Learnability	130
2.3.	USER INTERFACE	130
3. REI	LIABILITY	130
3.1.	ROBUSTNESS	130
3.2.	AVAILABILITY	
3.3.	ACCURACY	131
4. PEF	RFORMANCE	131
4.1. RE	ESPONSE TIME	131
4.2.	CAPACITY	132
5. SUPP	ORTABILITY	132
5.1. Sc	OFTWARE SUPPORT	132
5.2.	MAINTENANCE:	132
6. DESIG	GN CONSTRAINTS	133
6.1 Sc	OFTWARE LANGUAGE	122
	ESIGN TOOL	
	ASS LIBRARIES.	
	EVELOPMENT TOOL	
LESSON	N LEARNED:	133
CONCL	USION:	133
REFERI	ENCE AND BIBLIOGRAPHY	134

Artifact-1 Problem Statement/Project Proposal

Project Proposal

Project Title: MFAS-An Online Shopping System

Description:

The domain of our project is online shopping system. It is the system that provides the users facilities to buy goods, services, and other items directly from a seller through the internet without using an intermediary provider. It entails going online, landing on a seller's website, making a purchase, and coordinating delivery. Furthermore, it provides users services that when a user finds a product, they like on a website it allows them to add multiple items and adjust quantities to cart. The customer can pay for the item or service using a credit or debit card online or at the time of delivery. The items or services can be delivered to user once payment has been accepted.

But the problem arises when many of the users of online shopping system spend at least half an hour searching for a good product online due to less variety of products. About 15-20 minutes of the time of users is wasted due to traffic jam on website. Many of the users are squandered on finding their accurate range as the products mentioned are overpriced or the courier charge is double than the actual price of product thus wastage of half an hour of their time and not getting the accurate product due to which users gets frustrated and do not prefer this site especially the regular users.

We are going to build an updated system named as MFAS – An Online Shopping System, of this already existing system for the ease of users . This system will not only prevent load and access its database faster on website but there would be an option in which users can run multiple suggestion expander on it to increase the variety of products thus reducing users time on searching for a product and maintaining product quality. MFAS system will ensure that products prices are at reasonable rate and delivered to user on time so that more users enjoy buying on this app thus making it user friendly. Altogether ensuring user satisfaction.

Major Features:

- FE-1: Account Registration
- FE-2: Account Login
- FE-3: QR code scanner
- FE-4: Use of tools
- FE-5: Place an order
- FE-6: Product searching
- FE-7: Cart management
- FE-8: Multiple Payment options
- FE-9: Live chat with seller
- FE-10: Coin exchange
- FE-11: Products are replaced of poor quality
- FE-12: Feedback Provision
- FE-13: Provide seller rating
- FE-14: Discounts on products
- FE-15: Schedule delivery
- FE-16: Daily flash sales
- FE-17: Different language Support.
- FE-18: App privacy
- FE-19: Set up profile
- FE-20: Image zoom option
- FE-21: Selling products
- FE-22: Prime offers
- FE-23: Track order history
- FE-24: Different categories of product
- FE-25: Help center
- FE-26: Update notification to user
- FE-27: Multiple search options
- FE-28: Top-up and Travel
- FE-29: Utility bill payment
- FE-30: Mobile load

- FE-31: Shopping list
- FE-32: Create ads
- FE-33: History based product recommendation
- FE-34: Manage Stock
- FE-35: Progress bar
- FE-36: Yearly shopping report
- FE-37: Shopping list product recommendation

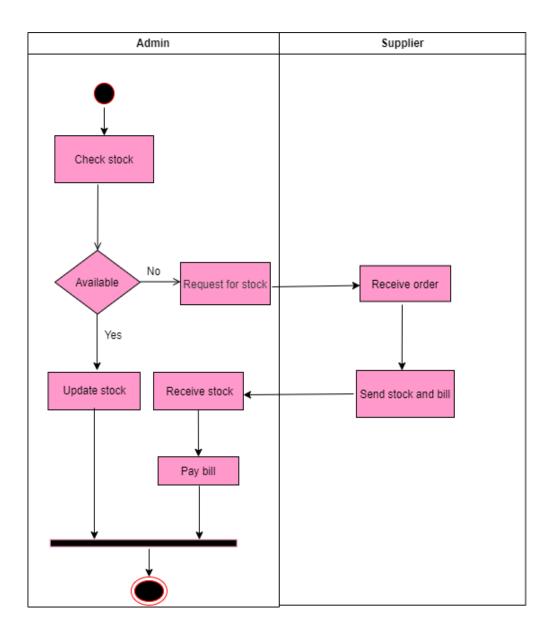
Literature Survey Table

Features	Daraz	Alibaba	AliExpress	Amazon	OLX	Metro	EBay	MFAS
F-1	✓	✓	✓	✓	✓	✓	✓	✓
F-2	✓	✓	✓	✓	✓	✓	✓	✓
F-3	✓	✓	✓	✓	✓	×	✓	✓
F-4	✓	*	×	✓	×	×	×	✓
F-5	✓	✓	✓	✓	✓	✓	✓	✓
F-6	✓	✓	✓	✓	✓	✓	✓	✓
F-7	✓	✓	✓	✓	✓	✓	✓	✓
F-8	✓	✓	✓	✓	✓	✓	✓	✓
F-9	✓	✓	✓	✓	✓	✓	✓	✓
F-10	✓	*	✓	×	×	×	×	✓
F-11	✓	✓	✓	✓	✓	✓	✓	✓
F-12	✓	√	✓	✓	✓	✓	✓	✓
F-13	✓	√	✓	✓	✓	✓	✓	✓
F-14	✓	✓	✓	✓	✓	✓	✓	✓
F-15	✓	✓	✓	✓	✓	✓	✓	✓
F-16	✓	✓	✓	×	*	✓	✓	✓
F-17	✓	✓	✓	✓	✓	✓	✓	✓
F-18	✓	✓	✓	✓	✓	✓	✓	✓
F-19	✓	✓	✓	✓	✓	✓	✓	✓
F-20	✓	✓	✓	✓	✓	✓	✓	✓
F-21	✓	✓	×	✓	✓	×	✓	✓
F-22	×	*	×	✓	×	×	×	✓
F-23	✓	✓	✓	✓	✓	✓	✓	✓
F-24	✓	✓	✓	✓	✓	✓	✓	✓
F-25	✓	✓	✓	✓	✓	✓	✓	✓
F-26	✓	✓	✓	✓	✓	✓	✓	✓
F-27	×	\checkmark	✓	✓	*	×	✓	✓
F-28	✓	*	×	×	×	×	×	✓
F-29	✓	*	×	×	×	×	×	✓
F-30	✓	*	×	×	*	×	×	✓
F-31	×	×	*	✓	×	✓	×	✓
F-32	×	*	×	×	✓	×	×	✓
F-33	√	√	√	✓	√	✓	✓	✓
F-34	√	✓	√	√	✓	√	√	√
F-35	×	×	×	*	*	*	×	√
F-36	×	*	×	*	×	*	×	√

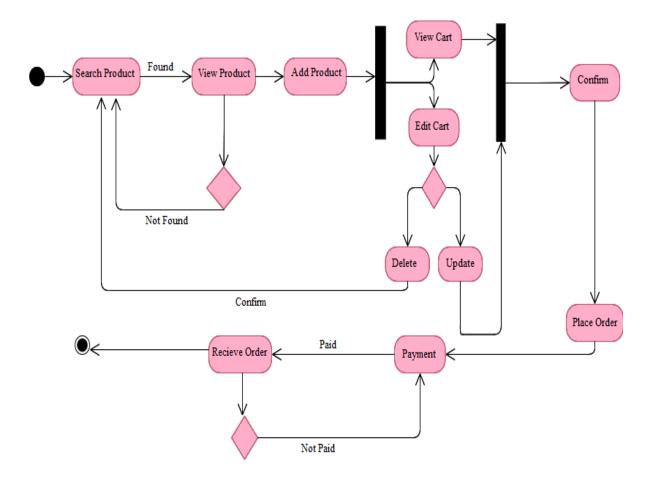
37 x x x	× ×	*	×	✓
-----------------	-----	---	---	---

Artifact-2 Business Models

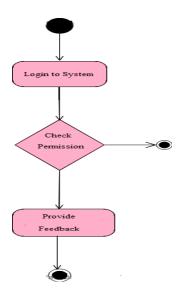
Manage Stock



Manage Cart



Feedback



Artifact-3 Vision Document

Table of Contents

1.	INTE	RODUCTION	21	
	1.1	PURPOSE	21	
	1.2	SCOPE DEFINITIONS ASSOCIATED ADDRESS TO SERVICE STORY ASSOCIATION OF THE	21	
J	1.3	DEFINITIONS, ACRONYMS, AND ABBREVIATION	22	
		Acronyms	22 22	
1		Definition References	22	
	1.4. r ⊥.5	OVERVIEW	23	
2.		ITIONING	23	
		PROBLEM STATEMENT	23	
	2.2	PRODUCT POSITION STATEMENT	24	
3.	STAI	KEHOLDER AND USER DESCRIPTIONS	24	
3	3.1	STAKEHOLDER SUMMARY	25	
		USER SUMMARY	26	
		USER ENVIRONMENT	27	
3	3.4	STAKEHOLDER PROFILES	27	
	3.4.1	, , , , , , , , , , , , , , , , , , ,	27	
	3.4.2	· ·	28	
	3.4.3	1 1 1	29	
	3.4.4	ů	30	
_	3.4.5	Technical Reviewer	31	
3		USER PROFILES	31	
	3.5.1	Registered customer	31	
	3.5.2	Admin	32	
-	3.5.3	Visitor	33	
	3.6	KEY STAKEHOLDER OR USER NEEDS	34	
-	3.7.1	ALTERNATIVES AND COMPETITION	35	
	3.7.1 3.7.2	Daraz Alibaba	35 35	
	3.7.2		35	
	3.7.3	1	35	
	3.7.5		36	
	3.7.6		36	
	3.7.7		36	
4.	PRO	DUCT OVERVIEW	36	
	1.1	PRODUCT PERSPECTIVE	36	
		SUMMARY OF CAPABILITIES	37	
4	1.3	ASSUMPTIONS AND DEPENDENCIES	38	
5.	PRO	DUCT FEATURES	38	
6.	CON	STRAINTS	40	
7.	QUA	LITY RANGES	40	
8.	PRECEDENCE AND PRIORITY 4			
9.	DOCUMENTATION REQUIREMENTS 4			

9.1	Usi	ER MANUAL	42
9.2	ON	LINE HELP	42
9.3	INS'	TALLATION GUIDES, CONFIGURATION, AND READ ME FILE	42
9.4. A	FE	EATURE ATTRIBUTES	43
9.4.1.	A.1	STATUS	43
9.4.2.	A.2	BENEFIT	44
9.4.3.	A.3	EFFORT	47
9.4.4.	A.4	RISK	48
9.4.5.	A.5	STABILITY	50
9.4.6.	A.6	TARGET RELEASE	51
9.4.7.	A.7	ASSIGNED TO	51
9.4.8.	A.8	REASON	51

1. Introduction

The vision document defines the high-level scope, purpose and need of MFAS-An Online Shopping System (MFAS OSS). It explains the abilities needed by stakeholders and why there is a need for stakeholders. A clear statement of the problems faced by MFAS OSS and solutions to those problems is mentioned in vision document. Furthermore, it highlights the features of MFAS OSS and the priority of those features. The current document is a final draft of vision document.

1.1 Purpose

The purpose of this document is to provide the viewer with a comprehensive detailed understanding of MFAS OSS. It describes requirements of system, system functionality and outlines design constraints that are considered when designing a system. It explains the main features of system such as placing an order, purchasing a product, and make payment. Furthermore, it highlights functional and non-functional requirements at an abstract level.

1.2 Scope

The MFAS Online Shopping System that is to be developed aids in providing user opportunities of purchasing, selling products and services from an extensive number of online shopping sites available on the web. Salient features of system are as follows,

- Users can purchase multiple products and can pay, through multiple payment options provided to them.
- System provides login facility to user.
- User can manage their account settings such as changing phone number and email whenever needed.

The features described here meet all the needs of user and all the features described in the document are being implemented in the system.

1.3 Definitions, Acronyms, and Abbreviation

1.3.1. Acronyms

OSS – Online Shopping System

SRS – Software Requirement Specification

OS – Operating System

1.3.2. Definition

Android: The Google operating system running on the smart phone.

Linux: It is an operating system for computers, mobile and other devices.

Java: is a high-level object-oriented programming language.

Microsoft Windows: an operating system that is developed and marketed by Microsoft.

IOS: is a mobile operating system created and developed by Apple.

1.4. References

The relevant citation includes:

- 1. K Karanxha , "Online Book Store Vision Document",18 April 2013 https://arxiv.org/ftp/arxiv/papers/1305/1305.4378.pdf
- Soft Slate of Schenectady, NY, "JAVA full set of features",2009 https://www.softslate.com/featureList.html
- S Gupta, "Online Shopping Project Documentation",2013
 https://images.template.net/wp-content/uploads/2016/07/26121721/Online-Shopping-Project-Documentation-Template.pdf
- S CHITTIL," Online Shopping Vision Document",2014
 http://dspace.cusat.ac.in/jspui/bitstream/123456789/8252/1/onlineshoppingsystem.pdf

1.5 Overview

The vision document lists the proposed features of MFAS OSS and focuses on the risk factors associated with system.

2. Positioning

2.1 Problem Statement

The problem of	Poor quality of product and load on website
affects	Registered customers
the impact of which is	Customers do not prefer the particular website
	and eventually shift to other
a successful solution	 Good and fine quality of products
would be	with different variety
	 Providing utmost convenience to all
	customers, making online purchases a
	smooth and easy process.

The problem of	low sales of product	
affects	Admin	
	,	
the impact of which is	Lowered position in market and less chances	
	of getting revenue and profits	
a successful solution	Higher revenue growth	
would be	Increase in income and profit	

The problem of	Lack of product choices and high cost of products
affects	Visitor
the impact of which is	Visitor do not register and move to other sites
a successful solution	Variety of products
would be	 Delivering product of lowest possible price

2.2 Product Position Statement

For	Admin ,Visitor, registered customer			
Who	Manages user records, deals with customers			
	and purchases products from system			
The MFAS-An Online Shopping	is a Web-based Online System			
System				
That	Will facilitate its customers to purchase			
	products			
Unlike	Existing shopping system			
Our product	Provides a variety of products of good quality			
	at reasonable prices, use of tools to enhance			
	the search of products to make online			
	purchases an easy process for customers.			

3. Stakeholder and User Descriptions

In this part of document the stakeholders of MFAS OSS will be described. There are total 7 system stakeholders out of which 3 are system users. Detailed analysis of these stakeholders is as follow;

3.1 Stakeholder Summary

Name	Description	Responsibilities
System Analyst Project Manager	A stakeholder who works with other stakeholders to resolve all their needs. A key stakeholder providing guidance in smooth and successful development of system.	Perform major role in use case modeling and identifying the actors related to system. Also, carry out the requirement elicitation process. The project manager leads and manages the project team and plays a leading role in planning and coordinating interactions with customers and users. They are responsible for directing the successful completion of project.
Requirement Specifier	This stakeholder works with customers and analysts to translate their needs into system requirements and these requirements are further use in design.	Specifies domain, non-functional, and functional requirements. Refines requirements as needed by the user.
Software Architect	This stakeholder is in charge of the development of software systems.	Responsible for overall architecture of the system and guiding in design and implementation of the system.

Technical	Collaborate with	This role is involved in the process of
Reviewer	stakeholders and	review that deals with providing
	customers and review	timely and appropriate feedback on
	their work for smooth	project artifacts.
	functioning of system.	

3.2 User Summary

Name	Description	Responsibilities	Stakeholder
Admin	They are end- users of system	Admin helps to manage the stock such as change product price, update products and delete products. Also, manage user record and handle complaints such as broken products Furthermore he also ensures that system provides payment options and generates bill to user.	Self-represented
Registered customer	They are end- users of system	They confirm that system will allow placing an order of products, adding them to cart and can manage profiles, provide feedback, and personal information (i.e., name, email id,) which is required for account login.	Self-represented

Visitor	They are end-	They certify that system allow	Self-represented
	users of	to register, search products,	
	system	their categories, and view	
		products.	

3.3 User Environment

The system will be mainly used by user who would shop to test the application and admin who is going to maintain the system. These users are assumed to have a shopping experience and know-how to browse through a shopping-cart application with basic understanding of computers and the internet. Admin has prior knowledge for operating the eclipse and Java programming languages as admin is responsible for updating and managing stock and products. MFAS OSS will operate in multiple operating systems i.e., Microsoft Windows, Google's Android OS, Apple iOS, and Linux supported by several browsers i.e., Chrome, Firefox, Microsoft Edge, and Internet explorer. The system is available in 2 versions (i.e., Mobile and Desktop application) so an active internet connection is required for the user to access to the system.

3.4 Stakeholder Profiles

3.4.1 System Analyst

Representative	Mr. Ali Akram
Description	A stakeholder who works with other stakeholders to resolve all their
	needs.
Type	A system analyst is a person who has a broad knowledge of
	hardware, software and is expert in understanding requirements
	engineering. They are consultants and change agents who specify any

	improvement needed in system.
Responsibilities	Software documentation is an important duty of the System Analyst. They write requirements of system and monitor their effectiveness. Furthermore, they evaluate how software, hardware and comprehensive IT systems fit the business needs of their client.
Success Criteria	Success is achieved when system analyst has reached a level of satisfaction when examining the performance of system. The system should accomplish user needs and produce high-quality products. System analyst is rewarded when system works according to the user.
Involvement	A system analyst solves business problems using design and analysis techniques. They are agents of change who help to identify the organizational improvements needed in the system and train and motivate others to use the system.
Deliverables	None
Comments / Issues	None

3.4.2 Project Manager

Representative	Mr. Raja Khalid
Description	A key stakeholder providing guidance in smooth and successful
	development of system.
Type	A project manager has a good understanding and knowledge of all the
	stages of project management and development. He is also a project
	analyst and plays major role in planning, organizing, and ensuring
	successful completion of project.
Responsibilities	Project managers are responsible for planning and developing the
	project idea, monitoring project progress, budgeting, and delivery of

	software projects.	
Success Criteria	Success of project manager is defined when project manager is	
	satisfied with the quality of project. Furthermore, they ensure that the	
	project completes all the scope of work and satisfies the stakeholder	
	needs. Project manager is rewarded for his efforts in terms of	
	successfully managing and completing of a project so that other	
	clients have confidence in him.	
Involvement	Project manager is involved in planning, organizing, and directing	
	the completion of specific projects for an organization while ensuring	
	these projects are on time, on budget and within scope.	
Deliverables	None	
Comments /	None	
Issues		

3.4.3 Requirement Specifier

Representative	Miss Ayesha Asif
Description	This stakeholder works with customers and analysts to translate their needs into system requirements and these requirements are further
	use in design.
Туре	Requirement specifier is who has a good understanding and knowledge of project-specific demands, requirements engineering and can translate needs into system requirement.
Responsibilities	Requirement specifier verifies that all the specified functionality in the system is as per the requirements mentioned in SRS. The requirement specifier details the specification of a part of the system's functionality by describing the requirements aspect of one or several use cases.
Success Criteria	The success of requirement specifier depends on that she has accurately developed a solution of system which maps all the

	features and requirements of system. Requirement specifier will be	
	rewarded if all the requirements are as per user need which will	
	result in her recognition in the project team.	
Involvement	Requirement specifier is involved in documenting and analyzing	
	requirements. They identify and understand the customer needs,	
	project demands and document them.	
Deliverables	None	
Comments /	None	
Issues		

3.4.4 Software Architect

Representative	Mr. Niaz Ahmed	
Description	This stakeholder leads in the development of software system.	
Туре	A software architect must have technical and analytical knowledge	
	of designing software to accomplish a final product.	
Responsibilities	Responsible for overall architecture of the system and guiding in	
	design and implementation of the system.	
Success Criteria	Success of software architect includes designing a complete solution	
	of project and make sure that he possesses leadership qualities so that	
	his decisions are effectively communicated to both stakeholders and	
	technical staff. Software architect will be rewarded if has established	
	a complete and clear design for the project to make his recognition in	
	the project team.	
Involvement	A software architect is involved in understanding all of the project	
	requirements and deciding the architectural details, patterns,	
	practices that will be used to provide a solution.	
Deliverables	None	

Comments /	None
Issues	

3.4.5 Technical Reviewer

Representative	Mr. Tariq Farooqi
Description	Collaborate with stakeholders and customers and review their work
	for smooth functioning of system.
Туре	They must have an expert inspection to provide feedback.
Responsibilities	This role is involved in the process of review that deals with
	providing timely and appropriate feedback on project artifacts.
Success Criteria	Success is accomplished when technical reviewer provides feedback
	on time. Technical reviewer is rewarded when he has provided
	accurate feedback to ensure successful completion of project.
Involvement	Technical reviewer is involved in analysis, conclusion and
	suggesting improvements of project, therefore, guiding in proper
	feedback.
Deliverables	None
Comments /	None
Issues	

3.5 User Profiles

3.5.1 Registered customer

Representative	Mr. Abram Tariq					
Description	A system user is who would shop and purchase products from MFAS					
	OSS make payments, provide feedback, and some personal					

	information i.e. Name, email id, contact number.			
Type	This user must be well-educated with good knowledge of technology			
	such as understanding of computer and internet.			
Responsibilities	They confirm that system will allow placing an order of products,			
	adding them to cart and can manage profiles, provide feedback, and			
	personal information (i.e., name, email id,) which is required for			
	account login			
Success Criteria	Thou will be facilitated on all types of comice processes such as			
Success Criteria	They will be facilitated on all types of service processes such as			
	online complaint registration, online feedback delivery, stock			
	ordering procedures and a few payment methods (cash, card, etc.).			
	Success will be determined when customers using this system will			
	express their confidence in the system.			
Involvement	They will be involved in evaluating the design of system and			
	providing feedback. System will help and guide the user in reviewing			
	accounts and generating bills.			
Deliverables	None			
Comments /	None			
Issues				

3.5.2 Admin

Representative	Mr. Mustafa Qasim
Description	Admin helps to maintain stock of system and user records.
Туре	Admin must have advanced computer literacy, communication skills and administrative skills to manage all the stock.
Responsibilities	Admin helps to manage the stock such as change product price,
	update products and delete products. Also, manage user record and
	handle complaints such as broken products Furthermore he also
	ensures that system provides payment options and generates bill to

	user. In addition to this, he makes sure that the interface of system
	is user-friendly. Admin will be rewarded if he performs all tasks
	smoothly and efficiently.
Success Criteria	Success of admin is determined if he manages all stock e.g. update
	products to stock and user record and try to remove user negative
	feedback to ensure user satisfaction.
Involvement	He helps in maintaining stocks, manages user records, orders and
	payment processing.
Deliverables	None
Comments /	None
Issues	

3.5.3 Visitor

Representative	Miss. Adina Aftab				
Description	Visitor will visit and see the products on the app and can buy				
	products by registering in the app.				
Туре	This type of user may know about technology or may not.				
Responsibilities	They certify that system allows to register, search products, their				
	categories, and view products				
Success Criteria	Success is determined when user using this system will express their				
	reliance on the system and purchases product of good quality from				
	the app.				
Involvement	This user is involved in viewing products and their categories in the				
	app.				
Deliverables	None				
Comments /	None				
Issues					

3.6 Key Stakeholder or User Needs

Need	Priority	Concerns	Current Solution	Proposed Solutions
Insurance of privacy	High	User's	The data of user	User's private
		private	was not saved	information should be
		information	and there was no	shown only to user
		is shown to	proper	whenever needed, to
		the public.	authentication	achieve this proper
			mechanism for	authentication
			ensuring the	mechanism should be
			privacy of user	developed such as user
			data.	should access his data
				through a code.
System must not be	High	Images of	Server always	Maintain the database
slow		product	fails and was not	to increase the server
		take a lot	upgraded.	speed so that users
		of time to		complete the order
		download		process faster.
		as well as		
		payment is		
		loaded for		
		a long		
		time.		
User-friendly interface	High	Poorly	None	Provide a user-friendly
		designed		interface that is well
		and		organized providing
		complex		quick access to
		interface.		common features so

				that users can easily
				navigate and
				understand the system.
User feedback	Moderate	System is	No response was	All the complaints of
		not updated	shown to user	user should be
		according	complaints	managed quickly by a
		to user		proper team to ensure
		needs		user satisfaction.

3.7 Alternatives and Competition

3.7.1 Daraz

Daraz is an online shopping app through which users can enjoy buying multiple products and can easily pay online through Daraz Wallet but the products of Daraz are of poor quality because they don't have an organized quality control department for maintaining the quality of products.

3.7.2 Alibaba

Users can purchase products from Alibaba and this app provides unique business opportunities to small enterprises and individuals but as there are too many merchants selling on Alibaba there is high competition for sellers to make good profits.

3.7.3 AliExpress

AliExpress offers users a great variety of categories and their products for users. to purchase but its shipments are very slow, and a product can take a lot of time. to reach the user.

3.7.4 Amazon

Amazon offers users greater ease of use over other retail e-commerce websites. It has superior search and multiple consumer reviews and ratings, but its drawback is that the product takes a lot of time to reach user.

3.7.5 OLX

OLX allows users to sell a wide range of products from home furniture, mobiles, dresses, and sale of property but its drawback is that it includes very few features.

3.7.6 Metro

Metro online shopping enables users to purchase a wide range of products under one single platform so there is no need of purchasing other products from other websites, but it takes a lot of time to refund products in metro.

3.7.7 E-bay

It allows users to not only buy products, but they get remarkable discounts on products, sometimes 52%. Its drawback is that it takes a lot of fees if any user wants to sell products on it.

4. Product Overview

This section usually consists of three subsections, mainly product perspective, product functions, assumptions, and dependencies.

4.1 Product Perspective

The complete overview of the system is as shown in the block diagram below:

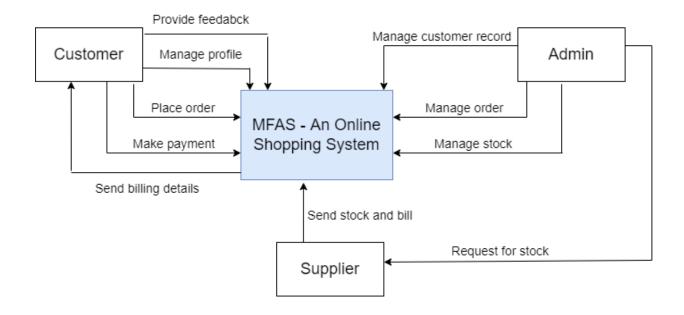


Fig 4.11 shows the system interaction with other entities.

4.2 Summary of Capabilities

Table 4-1 Customer Support System

Customer Benefit	Supporting Features		
Notification about the latest	The user will be notified about new		
updates	updates regarding any sale on the		
	user's mobile number.		
Efficient sales procedure	Once the user has placed order, system		
	will compute bill of user and user will		
	be able to see their bill receipts.		
	Discount will be provided to user if bill		
	exceeds a specific amount.		
Improved product quality	The proposed system will provide		
	users to purchase a good variety of		
	products at a reasonable price.		

System responds quickly	System responds within 2 seconds on		
	average to user requests and executes		
	all the processes.		
Assurance of security and	Our system provides authorized access		
privacy	only. Once the users have provided the		
	email and password these credentials		
	will be verified. Furthermore, their		
	data and information are protected by		
	system.		

4.3 Assumptions and Dependencies

The following are the assumptions and dependencies as laid out in this vision document:

- For using online app it is assumed that the users have some technical knowledge or background of using computer.
- The server must be updated to prevent load on website.
- It is assumed that admin has maximum qualification and is familiar with computer and programming languages knowledge.
- For easy and smooth installation of system all hardware and software requirements must be fulfilled.
- Users must have an active internet connection for using the system.

5. Product Features

- 5.1 Account Registration
- 5.2 Account Login
- 5.3 QR code scanner
- 5.4 Use of tools
- 5.5 Place an order
- 5.6 Product searching

5.37	Shopping list product recommendation
5.36	Yearly Shopping Report
5.35	Progress Bar
5.34	Manage stock
5.33	History based product recommendation
5.32	Create ads
5.31	Shopping list
5.30	Mobile load
5.29	Utility bill payment
5.28	Top-up and Travel
5.27	Multiple search options
5.26	Update notification to user
5.25	Help center
5.24	Different categories of product
5.23	See old history
5.22	Prime offers
5.21	Selling products
5.20	Image zoom option
5.19	Set up profile
5.18	App privacy
5.17	Different language Support.
5.16	Daily flash sales
5.15	Schedule delivery
5.14	Discounts on products
5.13	Provide seller rating
5.12	Feedback Provision
5.11	Products are replaced of poor quality
5.10	Coin exchange
5.9	Live chat with seller
5.8	Multiple Payment options
5.7	Cart management

6. Constraints

6.1 Supportability

System should operate in any version of browser or in computer having active internet connection.

6.2 Security

Our proposed system provides access to authorized users only. Once the users have entered their valid credentials such as username and password they will be verified by system.

6.3 Capacity

The database must have 524TiB amount of storage space.

7. Quality Ranges

Maintainability

System will be easily changeable and maintainable by other developers.

Usability

System shall be designed with user-friendly interfaces so that they are easily understood by users.

Availability

The system is online 24 hours a day and 365 days a year.

Responsiveness

System responds within 2 seconds on average to local user request.

Fault tolerance

System shall continue to operate properly in the existence of the failure of one or more faults within some of its components.

8. Precedence and Priority

Features	Priority	
FE1: Account Registration		
FE2: Account Login		
FE6: Place an order		
FE7: Product searching		
FE9: Cart management		
FE8: Multiple payment options		
FE9: Live chat with seller	Critical	
FE11: Products are replaced of poor quality		
FE12: Feedback provision		
FE13: Provide seller rating		
FE15: Schedule delivery		
FE24: Different categories of product		
FE18: App privacy		
FE21: Selling products		
FE3: QR code scanner		
FE4: Use of tools		
FE27: Multiple search options		
FE10: Coin exchange		
FE14: Discount on products	Important	
FE16: Daily flash sales		
FE17: Different language support		
FE19: Set up profile		
FE20: Image zoom option		
FE22: Prime offers		

FE28: Top-up and travel	
FE31: Shopping list	
FE32: Create ads	
FE33: History based product recommendation	
FE23: Track order history	
FE26: Update notification to user	
FE25: Help center	Useful
FE29: Utility bill payment	Oserai
FE30: Mobile load	
FE34: Manage Stock	

9. **Documentation Requirements**

This document section describes the documentation requirements of MFAS-An Online Shopping System.

9.1 User Manual

It contains all the information necessary for users to make full use of system and describes use of system to online users. The manual includes,

- Registration/login
- All the procedures including place order and cart management
- Calculate bill
- All features of system

9.2 Online Help

Online help will facilitate users and answer their all queries. It would contain all the information as mentioned in user manual.

9.3 Installation Guides, Configuration, and Read Me File

Installation guide includes,

- Installation methods
- Minimum software requirements

The Read Me File includes all the installation details description of features also include the installation errors, their possible causes and solutions. It also includes how system downloads and how this system works in android and iOS and different mobile applications.

9.4. A Feature Attributes

9.4.1. A.1 Status

Proposed	FE35: Progress Bar						
	FE36: Yearly Shopping Report						
	FE37: Shopping list product recommendation						
Approved	FE27: Multiple search options						
	FE8: Multiple payment options						
	FE6: Product searching						
	FE15: Schedule delivery						
	FE24: Different categories of product						
	FE18: App privacy						
	FE21: Selling products						
	FE20: Image zoom option						
	FE26: Update notification to user						

Incorporated	FE1: Account Registration				
	FE2: Account Login				
	FE5: Place an order				
	FE23: Track order history				
	FE7: Cart management				
	FE12: Feedback provision				
	FE23: Track order history				
	FE13: Provide seller rating				
	FE14: Discount on products				
	FE16: Daily flash sales				
	FE19: Set up profile				

9.4.2. A.2 Benefit

Critical	FE1: Account Registration						
	FE2: Account Login						
	FE5: Place an order						
	FE6: Product searching						
	FE7: Cart management						
	FE8: Multiple payment options						
	FE9: Live chat with seller						
	FE11: Products are replaced of poor quality						
	FE15: Schedule delivery						
	FE24: Different categories of product						
	FE18: App privacy						
	FE21: Selling products						
	FE20: Image zoom option						
	FE12: Feedback provision						
	FE33: History based product recommendation						
	FE34: Manage Stock						
Important	FE3: QR code scanner						
	FE4: Use of tools						
	FE27: Multiple search options						
	FE10: Coin exchange						
	FE14: Discount on products						
	FE16: Daily flash sales						
	FE17: Different language support						
	FE22: Prime offers						
	FE28: Top-up and travel						
	FE31: Shopping list						
	FE32: Create adds						

Useful **FE23:** Track order history

FE26: Update notification to user

FE25: Help center

FE29: Utility bill payment

FE30: Mobile load

FE13: Provide seller rating

FE19: Set up profile

9.4.3. A.3 Effort

High	FE18: App privacy					
	FE21: Selling products					
	FE23: Track order history					
	FE3: QR code scanner					
Medium	FE4: Use of tools					
	FE27: Multiple search options					
	FE10: Coin exchange					
	FE14: Discount on products					
	FE16: Daily flash sales					
	FE17: Different language support					
	FE22: Prime offers					
	FE28: Top-up and travel					
	FE31: Shopping list					
	FE32: Create adds					
	FE7: Cart management					
	FE26: Update notification to user					
	FE12: Feedback provision					

Low **FE1:** Account Registration FE2: Account Login **FE8:** Multiple payment options **FE25:** Help center **FE29:** Utility bill payment **FE30:** Mobile load **FE13:** Provide seller rating **FE19:** Set up profile **FE34:** Manage stock **FE5:** Place an order **FE6:** Product searching **FE9:** Live chat with seller **FE15:** Schedule delivery FE24: Different categories of product **FE20:** Image zoom option **FE23:** History based product recommendation **FE11:** Products are replaced of poor quality

9.4.4. A.4 Risk

High	FE7: Cart management					
	FE18: App privacy					
Medium	FE3: QR code scanner					
	FE10: Coin exchange					
	FE26: Update notification to user					
	FE14: Discount on products					
	FE16: Daily flash sales					
	FE22: Prime offers					
	FE28: Top-up and travel					
	FE11: Products are replaced of poor quality					
	FE12: Feedback provision					
	FE8: Multiple payment options					

Low **FE25:** Help center

FE21: Selling products

FE23: Track order history

FE17: Different language support

FE31: Shopping list

FE1: Account Registration

FE2: Account Login

FE29: Utility bill payment

FE30: Mobile load

FE13: Provide seller rating

FE19: Set up profile

FE34: Manage stock

FE5: Place an order

FE6: Product searching

FE9: Live chat with seller

FE15: Schedule delivery

FE24: Different categories of product

FE20: Image zoom option

FE33: History based product recommendation

FE4: Use of tools

FE27: Multiple search options

FE32: Create adds

9.4.5. A.5 Stability

Stability of system depends on these features,

FE-1: Account Registration

FE-5: Place an order

If any of these factors change will affect stability of system.

9.4.6. A.6 Target Release

We will release those features in first version which have critical priority i.e. FE1, FE2, FE6, FE7, FE40, FE9, FE10, FE11, FE13, FE17, FE31, FE32, FE33, FE23, FE26, FE35. All others features which are important will be included in second version i.e. FE4, FE5, FE37, FE16, FE22, FE24, FE25, FE27, FE28, FE38, FE41, FE44. All other useful features will be included in next version.

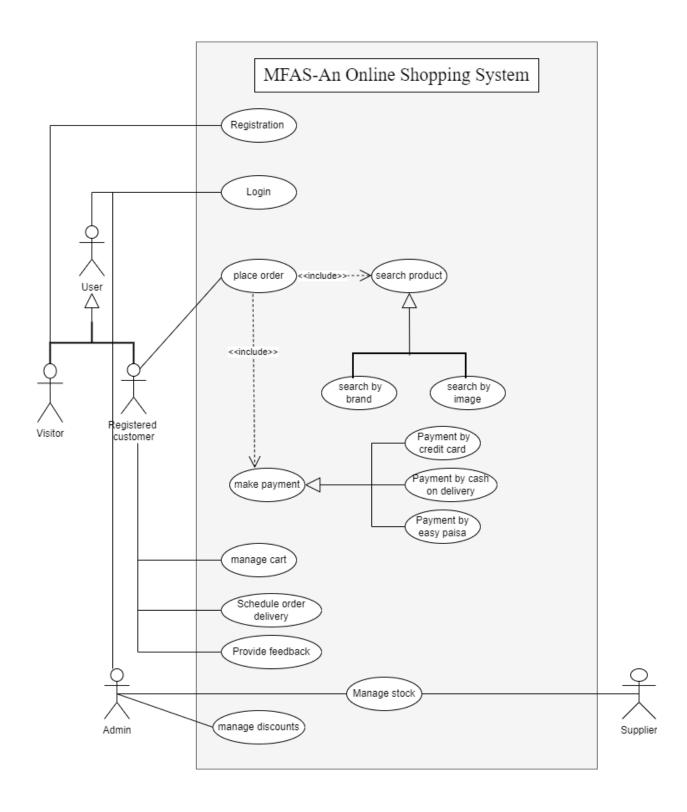
9.4.7. A.7 Assigned To

Feature ID	Members
F-1, F-2, F-6, F-7, F-9, F-10, F-11, F-13, F-17,	Aleesha Malik
F-31, F-33, F-23, F-26, F-4, F-5, F-16, F-22	Mariam Farooqi
F-24, F-25, F-27, F-28F-41, F-44, F-14,	Fatima Mushtaq
F-12, F-29, F-37, F-34, F-21, F-30, F-15	Saba Noor

9.4.8. A.8 Reason

The features that are included in vision document are organized after interview and workshops with stakeholders i.e. customers. The reason of this system is to build an updated system of already existing system. MFAS-An Online Shopping System will work efficiently.

Artifact-4 Use Case Modeling



Use case: Registration

Brief Description: This use case allows the user to register in the system to access specific functions such as purchasing products. To register into system user have to enter their valid username, password, email and phone number.

Primary actors: Visitor

Preconditions: User should have a stable internet connection and valid credentials

Main Flow:

Actor:

- 1. User starts registration process.
- 3. Enters all the required information i.e. username, password, email, and phone number.
- 4.User submits their request for registration to system.
- 6. User enters the code.

System:

- 2. System displays registration page which includes all the necessary information such as username, email, password, phone number of user's account.
- 5. System sends OTP verification code to user's email.
- 7. System verifies the code entered by user.
- 8. System displays message of account created Successfully.
- 9. System save account details of user in users respective database.

Post condition: User has registered successfully, and system will notify user of successful registration via email.

Alternative flow:

Actor:

- 3a) Invalid email and/or password.
- 3b) User enters incorrect username.

System:

3a) 1. System displays "Invalid email and/or password" message.

- 3c) Missing required information.
- 3d) Invalid phone number format.
- 6a) Entered code is invalid.

- 3a) 2. System prompts to reenter email and/or password.
 - 3a) 3. Use case resumes at main flow step 3.
- 3b) 1. System displays" Username Already Exist" error message.
- 3b) 2. System prompts user to enter new username.
- 3c) 1. System displays "Fill in the required spaces" message.
- 3c) 2. System prompts user to fill all the required spaces.
- 3d) 1. System displays message "Invalid phone number format".
- 3d) 2. System prompts user to reenter phone number.
 - 6a) 1. System displays "Invalid Code" message.
- 6a) 2. System prompts user to enter 6-Digit code.

Special Requirements:

Security:

- 1. System will secure all the details of users.
- 2. Access will be granted to authorize users by authentication with a password and code.

Performance: System will respond to all user clicks within 5 seconds.

Use case: Login

Brief Description: This use case allows the user to log in to the system to access specific functions depending on the user's role. To login into the system users must enter their valid email and password. Upon successful login system will display the relevant user's home page.

Primary actors: Registered Customer, Admin

Preconditions: Customer should be registered and must have valid account

Main Flow:

Actor:

- 1. User starts login process.
- 3. User enters valid email and password to access account.
- 4. User submits their request for login to system

System:

- 2. System displays login page so that user enters their email and password.
 - 5. System validate user entered credentials.
- System displays notification account logged in successfully.
- 7. System displays homepage according to user status (admin, customer).

Post condition: System will display a relevant homepage according to user status (admin, customer).

Alternative flow:

Actor:

- 3a) Invalid email and/or password.
- 3b) User forgot password.
- 1. User starts the process of resetting password.
- 4. Selects option "Using Email" or "Using Number".

System:

- 3a) 1. System displays "Invalid email and/or password" message.
- 3a) 2. System prompts to reenter email and/or password.
- 3a) 3. Use case resumes at main flow step 3.
- 3b) 2. System displays page of forgot password.

- 6. Enter number or email and submits to system.
 - 8. User submits on link in email or enters Code.
 - 10. User enters new password.
 - 11. User confirms password.
 - 12. User submits his password to system.
- 3c) Missing email and/or password.

- 3b) 3. System prompts user to choose a verification method.
- 3b) 5. Displays "Enter Email" if email is selected else, display "Enter Number".
- 3b) 7. System verifies account and send email to user for resetting password otherwise send code to user's mobile number.
 - 3b) 9. Display an interface for new password.
- 3b) 13. Display "Password Updated Successfully" message.
- 3c) 1. System prompts for email and/or password.
 - 3c) 2. Use case resumes at main flow step 3.

Special Requirements:

Security:

- 1. System will secure all the details of users.
- 2. Access will be granted to authorized users by authentication with a password and code.

Robustness: In case any incomplete information or any invalid input is entered, system display error message on screen within 2 seconds.

3. ID: UC- 03

Use case: Place order

Brief Description: User accesses the system and searches the required product and when users get the products of their choice, they confirm the order of selected product.

Primary actors: Registered Customer

Preconditions: 1. The record of product exists to view it.

2. User should be login into system.

Main Flow:

Actor:

- 1. User starts placing order process.
- 3. Refer to include UC- 04, user searches for product.
- 4. Enters quantity, color and size of product.
- 5. User submits their request to place order to system.
- 7. User fill the information regarding shipping of product.
- 9. Refer to include UC- 07, user makes payment.

System:

- 2. System displays homepage of products catalog.
 - 6. System displays page of shipping details.
- 8. System save the information of user details in user respective database.
- System displays "Order placed successfully" message.

Post condition: Order of product has been placed.

Alternative flow:

Actor:

- 4a) Missing required details.
- 7a) User do not fill the complete form.

System:

- 4a) 1.System displays "Please mention the required details" error message.
- 4a) 2. Prompts user to mention the required details.
- 7a) 1. System displays "Fill in the required spaces" error message.
- 7a) 2. Prompts user to fill in the required spaces.

Special Requirements:

Availability: System will be available 24/7 for users to place order.

Performance: System will respond to all clicks of user within 5 seconds.

Robustness: In case any incomplete information or any invalid input is entered system will

display	error	message	on	screen	within	2	seconds
uispiay	CITOI	message	OH	SCICCII	WILLIII	_	seconus.

Use case: Search product

Brief Description: User accesses the system and searches the required product by multiple options such as audio, image, brand and name on the search bar to purchase it.

Primary actors: Registered Customer

Preconditions: 1. The product exists to view and search it.

2. User should be login into system.

Main Flow:

Actor:

- 1. User starts the search process.
- 2. User chooses option for search, refer to generalized UC- 05, UC- 06.

System:

- 3. System will show all the products.
- 4. Refer to generalized UC- 05, UC- 06.

Post condition: User can view all the details about required product.

Alternative flow:

Actor:

System:

None

None

Special Requirements:

User interface: 1. The system will provide multiple language support to users.

2. System shall have a user-friendly interface so that user can understand it easily.

Performance: When user search any product system will take 2 sec to display relevant product image.

Availability: System will be available 24/7 for users to search any product.

Use case: Search by brand			
Brief Description: In this use case user search by particular brand on search bar to select any			
product.			
Primary actors: Registered Customer			
Preconditions: 1.The product of that selected brand exists to view it.			
2. User should be login into system.			
Main Flow:			
Actor	System:		
1. User will search by typing a brand name.	2. System will show all the products.		
3. User selects one desired product.	4. System will display details including name		
	price, description, quantity, total stock,		
	availability and rating of that product.		
Post condition: User can view all the details about	Post condition: User can view all the details about requested product.		
Alternative flow:			
Actor:	System:		
1a). Incorrect name of brand.	1a) 1. System displays "Result not found"		
	message.		
	1a) 2. System prompts user to try again.		
	1a) 3. Use case resumes at main flow step 1.		

Special Requirements:

Performance: When user search any product system will take 2 sec to display relevant product image.

Availability: System will be available 24/7 for users to search any product.

6. ID: UC-06

Use case: Search by image

Brief Description: User search by particular image on search bar icon to select any product.

Primary actors: Registered Customer

Preconditions: 1. The product exists to view and search it.

2. User should be login into system.

Main Flow:

Actor:

- 1. User selects image icon in search bar.
- 3. User uploads image of product.
- 5. User selects one desired product.

System:

- 2. Displays "Upload Image" message mentioned with size less than 5MB.
- 4. System will show all the products.
- System will display details including name, price, description, quantity, total stock availability and rating of that product.

Post condition: User can view all the details about required product.

Alternative flow:

Actor:

- 3a). Irreverent image of product.
- 3b). Image size is greater than 5MB.

System:

- 3a) 1. Displays "Sorry we could not find product you are looking for" error message.
 - 3a) 2. Prompts user to try again.
 - 3a) 3. Use case resumes at main flow step 3.
- 3b) 1. Displays "Image size should be less than 5MB."
 - 3b) 2. Prompts user to try again.
 - 3b) 3. Use case resumes at main flow step 3.

Special Requirements:

User interface: System shall have a user-friendly interface so that user can understand it easily. **Performance:** When user search any product system will take 2 sec to load and display relevant product image.

Availability: System will be available 24/7 for users to place order.

7. **ID: UC- 07**

Use case: Make payment

Brief Description: In this use case user makes payment of the product they have ordered by choosing payment options provided to them such as payment by credit card, easy paisa and cash.

Primary actors: Registered Customer

Preconditions: 1. User has placed order for the product.

2. User must be login into system.

Main Flow:

Actor:

- 1. User starts payment process.
- 4. User selects payment mode, refer to generalized UC- 8, UC- 09 and UC- 10.

System:

- 2. System displays interface of payment.
- System prompts user to choose payment method.
- 5. Refer to generalized UC- 8, UC- 09 and UC-10.

Post condition: Payment is done successfully.

Alternative flow:

Actor:

4a). Unchecked payment mode.

System:

- 4a) 1. Display "Please choose payment mode" error message.
- 4a) 2. Prompts user to choose payment mode.
- 4a) 3. Use case resumes at main flow step 4.

Special Requirements:

User Interface: System shall have a user-friendly interface so that user can understand it easily.

Use case: Payment by credit card

Brief Description: In this use case user makes payment of the product they have ordered by selecting payment mode such as credit card.

Primary actors: Registered Customer

Preconditions: 1. User has placed order for the product.

- 2. User must be login into system.
- 3. User must have valid credit card.

Main Flow:

Actor:

- 1. User selects credit card option
- 3. User will enter credit card information.
- 4. User submits credit card information to system.

System:

- System will display interface for credit card information and total bill.
- System validates credit card information entered by user.
- System displays message "Payment done successfully"

Post condition: Payment is done successfully.

Alternative flow:

Actor:

- 3a). Incorrect credit card information.
- 3b). Missing credit card information.

System:

- 3a) 1. System displays error message "Input right value"
- 3a) 2. System prompts user to reenter information.
- 3a) 3. Use case resumes at main flow step 3.
- 3b) 1. System displays error message "Please fill in the required spaces"
- 3b) 3. Use case resumes at main flow step 3.

Special Requirements:

Learn ability: User interfaces will be easy for so that they can understand system functionality. **Performance:** 1. When user search any product system will take 2 sec to display relevant product image.

2. System will respond to all clicks of user within 5 seconds.

J. 1D: 00)			
Use case: Payment by cash on delivery			
Brief Description: In this use case user makes payment of the product they have ordered,			
manually by selecting payment mode such as cash on delivery.			
Primary actors: Registered Customer			
Preconditions: 1. User has to place order for the page 2. User must be login into system.			
Main Flow:			
Actor:	System:		
1. User selects cash on delivery option.	2. System will display interface for credit card information and total bill.		
	3. Displays message "Pay cash to courier when order has been received.		
Post condition: Payment is done successfully.			
Alternative flow:			
Actor:	System:		
None	None		
Special Requirements:			

Learn ability: User interfaces will be easy for so that they can understand system functionality.

10. ID: UC-10

Use case: Payment by easy paisa

Brief Description: In this use case user makes payment of the product they have ordered by selecting payment mode such as easy paisa.

Primary actors: Registered Customer

Preconditions: 1. User has to place order for the product.

2. User must be login into sys3. User must have easy paisa	
Main Flow:	
Actor: 1. User selects easy paisa option. 3. Enter account number and payment.	 System: 2. Display interface for easy paisa account number and total bill. 4. Verifies account number. 5. System displays message "Payment received successfully"
Post condition: Payment is done successfully	·
Alternative flow:	
Actor: 3a). Invalid account number.	System: 3a) 1. Displays error message "Input right value" 3a) 2. Prompts user to reenter information. 3a) 3. Use case resumes at main flow step 3.
Special Requirements:	1

Use case: Manage cart		
Brief Description: In this use case user is preparing for an ordering process with adding items to or removing items from the shopping cart.		
Primary actors: Registered Customer		
Preconditions: 1. User must be login into system. 2. User executes searching process.		
Main Flow:		
Actor: 1. User will add to or remove product from	System: 2. System will allow user to add and	

Learn ability: User interfaces will be easy for so that they can understand system functionality.

shopping cart.	remove product from cart and will display specific product being added to or removed from cart.		
Post condition: 1. User will successfully add or remove product from shopping cart. 2. The total bill will be recalculated if the user changes the number of products.			
Alternative flow:			
Actor: None	System: None		
Special Requirements: Learn ability: User interfaces will be easy for so that they can understand system functionality. Performance: System will respond to all clicks of user within 5 seconds.			
12. ID: UC- 12			
Use case: Manage stock			
Brief Description: In this use case admin will ma	anage stock in a way that admin can add, update		
or remove stock in system.			
Primary actors: Admin			
Preconditions: 1. Admin must be login into the system. 2. There must be some products present in system to update them or in warehouse to add them in system.			
Main Flow:			
Actor: 1. Admin will start managing stock process. 3. Admin will update and add, remove the stock in system.	System: 2. System will display interface of manage products. 4. System will allow admin to update and add stock.		
Post condition: Product changes will be saved in the system.			
Alternative flow:			
Actor: None	System:		

	None	
Special Requirements: Performance: System will respond to all clicks of admin within 5 seconds.		

Use case: Manage discounts Brief Description: In this use case admin will be able to add, update or remove any discount packages. Primary actors: Admin Preconditions: Admin must be login into system. Main Flow: Actor: System: 1. Admin will start managing discounts by 2. System will display customer management opening customer management catalog. interface to admin. 4. System will display multiple categories such 3. Admin will select discount option. 5. Admin will choose such as update, add and as add discount, update discount and remove remove discount. discount. 6. System will allow admin to update, add and remove discount. 7. System will save the discount packages. Post condition: Admin will successfully add, update and remove discount packages. Alternative flow: Actor: System: None None **Special Requirements:**

Performance: System will respond to all clicks of admin within 5 seconds.

14. ID: UC- 14

Use case: Schedule order delivery

Brief Description: In this use case user will be able to schedule their delivery according to their set time and date. Primary actors: Registered Customer Preconditions: 1. User must be login into system. 2. User must place order for a product. Main Flow: System: Actor: 1. User will start the process of scheduling order 2. System will display interface of order delivery. delivery. 4. User will enter date and time. 3. System will prompt the user to schedule date 5. User will submit the request for delivery. and time. 6. System will display "delivery scheduled successfully" message. Post condition: User have successfully schedule date and time of delivery. Alternative flow: Actor: System: None None **Special Requirements:**

15. ID: UC- 15

Use case: Provide feedback

Brief Description: In this use case the user will be able to give the feedback regarding products. In this feedback user will give the complaints about quality of product and also rating the seller products.

Performance: System will respond to all clicks of admin within 5 seconds.

Primary actors: Registered Customer

Preconditions: 1. User must be login into system.	
Main Flow:	
Actor: 1. User will start providing feedback process. 2. User gives the feedback of product such as quality of product and also rating the seller.	System: Admin: 3. Admin will take action on feedback or rating and update system according to user needs.
Post condition: User will successfully give feedba	ack about product.
Alternative flow:	
Actor: None	System: None
Special Requirements: Performance: System will respond to all clicks of	user within 5 seconds.

Artifact-5 Features and Software Requirements

FE1: Account registration

- **SRS-1.1:** User will be able to register into system and system will display registration page to user.
- **SRS-1.2:** User will be able to enter the information in the text fields provided by system such as email, phone number, password, and username.
- **SRS-1.3:** System will guide the user such that suggest them for using strong password and provide suggested email id and phone number format.
- **SRS-1.4:** User will be able to enter minimum 8 digits and maximum 12 digits password.
- **SRS-1.5:** User will be able to submit all the details to system and system shall save all the users details in user respective database.
- **SRS-1.6:** System will send OTP verification code to users email for verifying password.
- **SRS-1.7:** User will be able to enter the six-digit code and system shall send confirmation email to user about successful registration in system.
- **SRS-1.8:** User will not be able to register in system if their details will be invalid.

FE2: Login

- **SRS-2.1:** System will display login page to user and then user shall be able to enter the information in the text fields such as email and password.
- **SRS-2.2:** User will be able to submit details to system for login and system shall save all the users details in user respective database.
- **SRS-2.3:** Admin will be able to also login into system by entering valid credentials such as email or password and system will save admin details in database.
- **SRS-2.4:** After successful login system will display the login interface to users and admin.
- **SRS-2.5:** If password or e-mail id is wrong, users won't be able to access their account and the system will display invalid email/password.
- **SRS-2.6:** If user wants to reset password, then they shall be able to send request to system.
- **SRS-2.7:** Password will be updated when the system approves the password change request.
- **SRS-2.8:** System will provide two methods (i.e., email or phone number) for user account verification.

- **SRS-2.9:** System will send verification code to user in email or phone number and user shall be able to enter code.
- **SRS-2.10:** System will display interface of new and confirm password and user shall be able to submit new password to system.
- **SRS-2.11:** System will facilitate user to save new password.

FE3: QR code scanner

- **SRS-3.1:** After registering into system, user will be able to go to settings option and select QR code scanner.
- **SRS-3.2:** System will display interface of code and user will be able to open built in camera of mobile.
- **SRS-3.3:** System will automatically scan code and application will be opened on the web.
- **SRS-3.4:** User will be able to login in system via QR code until user logouts form application.
- **SRS-3.5:** Whenever user will be able to use this QR code system will generate new code for user.

FE4: Use of tools

- **SRS-4.1:** User will be able to search product name on search bar.
- **SRS-4.2:** User will be able to run different tools such as helium10 on application.
- **SRS-4.3:** System will load again, and tool will be run on system.
- **SRS-4.4:** System will display multiple products keywords when user searches any product.
- **SRS-4.5:** User will be able to search for a great variety of products.

FE5: Place an order

- **SRS-5.1:** User will be able to search for a product by entering the name of product, its brand name, or any category of product.
- **SRS-5.2:** User will be able to select a product and place order for it.
- **SRS-5.3:** User will be able to enter details of product and system will verify details.
- **SRS-5.4:** User will be able to provide delivery information and fill in shipping details which will include address, phone number, email, name of user.

- **SRS-5.5:** User will be able to choose the payment method such as cash on delivery, easy paisa and credit card.
- **SRS-5.6:** System will display interface of particular payment mode and user shall be able to enter the details such as account number.
- **SRS-5.7:** System will be able to generate total bill.
- **SRS-5.8:** User will be able to receive the order confirmation.

FE6: Product searching

- **SRS-6.1:** System will display home page to user which will include search bar.
- **SRS-6.2:** User will be able to search product by entering the name of product, its brand name or any category of product.
- **SRS-6.3:** System will display all the available products user has searched according to name, its brand and category.
- **SRS-6.4:** User will be able to select required product and system will display image of that selected product.
- **SRS-6.5:** System will also show the details of selected product including name, price, description, quantity, color, size, total stock availability and rating of that product.
- **SRS-6.6:** System will give an option to user to buy that product or add to cart and user shall be able to select one option.
- **SRS-6.7:** User will be able to chat with the seller and can take more detailed information about that selected product such as user want to see live video of that product.

FE7: Cart management

- **SRS-7.1:** User will be able to add product to online shopping cart.
- **SRS-7.2:** User will be able to remove product from online shopping cart.
- **SRS-7.3:** User will be able to view product from online shopping cart at any time
- **SRS-7.4:** User will be able to buy product from online shopping cart.
- **SRS-7.5:** User will be able to start their checkout from online shopping cart.
- **SRS-7.6:** User will be able to apply filters to cart so that products will be displayed in cart according to ascending and descending order with respect to price of product.
- **SRS-7.7:** There should be reset button in cart so that user will be able to empty online shopping cart.
- **SRS-7.8:** System will ask user are you sure you want to delete items.

- **SRS-7.9:** User will be able to change amount of products in online shopping cart.
- **SRS-7.10:** User will be able to save items in cart according to date to prevent adding products in cart again and again the same day as date will be saved by system.

FE8: Multiple payment options

- **SRS-8.1:** User will be able to select multiple payment methods such as jazz cash, easy paisa, credit card and cash on delivery.
- **SRS-8.2:** System will display interface according to chosen method.
- **SRS-8.3:** User will be able to view the payment modes
- **SRS-8.4:** User can also choose any method and provide its details accordingly.
- **SRS-8.5:** User will be able to select one payment mode at a time.
- **SRS-8.6:** When user will select one payment mode total bill will be displayed by system.
- **SRS-8.7:** User will be able to enter account number in each of the mode and system will verify details.
- **SRS-8.8:** System will display message payment done successfully.

FE9: Live chat

- **SRS-9.1:** User will be able to contact seller to ask information about product.
- **SRS-9.2:** System will display options to user to chat with seller.
- **SRS-9.3:** System will provide live video and voice call to communicate with seller.
- **SRS-9.4:** System will display the type of questions to user when contacting seller.

FE10: Coin exchange

- **SRS-10.1:** System will display all the respective coins and the days in which coin can be claimed by user.
- **SRS-10.2:** User will be able to claim coins by checking-in daily for 7 days and on the 7th day user shall have the biggest reward such as buying one product and getting one free.
- **SRS-10.3:** Once the coin has been claimed by user it cannot be claimed again.
- **SRS-10.4:** When the user will be able to collect all coins, they will be automatically converted into discount vouchers by system.
- **SRS-10.5:** When the user purchases any product this discount shall be applied to it thus reducing total cost of product.

- **SRS-10.6:** This discount will be applied to all the products users will purchase on that day.
- **SRS-10.7:** This total discount will not be applied after the given 7 days are over. After that the process of coins will be reset by system.

FE11: Products are replaced of poor quality

- **SRS-11.1:** User will be able to go to manage order option and system will show the button of replacing product.
- **SRS-11.2:** System will display interface of return items and user shall be able to fill the return form which will includes details such as order number, tracking number, name of the product and type and delivery information.
- **SRS-11.3:** User will replace products within 7 days after purchasing the product.
- **SRS-11.4:** After 7 days the replace option will be not accessible to users.

FE12: Feedback provision

- **SRS-12.1:** User will be able to provide feedback when they received the order and also about the application.
- **SRS-12.2:** User will be able to give their review about the size, quality, and color of the product.
- **SRS-12.3:** user will be able to provide multiple feedbacks and system will save the feedback in database.
- **SRS-12.4:** User will be able to delete feedback added through a reset button.
- **SRS-12.5:** System will ask user are you sure you want to delete feedback.
- **SRS-12.6:** Options will be given to user that what kind of response they will give in feedback such as excellent, poor and good.

FE13: Provide seller rating

- **SRS-13.1:** User will be able to go to settings option and select my orders.
- **SRS-13.2:** User will be able to see their previous order that they have top review.
- **SRS-13.3:** System will display interface according to chosen order.
- **SRS-13.4:** Rating is based on five stars with one being the lowest and five being the highest. User will be able to give rating to the seller.
- **SRS-13.5:** System will save the rating in database.
- **SRS-13.6:** User will be able to delete rating through a reset button.

- **SRS-13.7:** System will ask user are you sure you want to delete the rating.
- **SRS-13.8:** User will be able to provide one rating at a time when login from one email.

FE14: Discount on products

- **SRS-14.1:** System will provide user discounts on specific brands.
- **SRS-14.2:** User will be able to view all discounts.
- **SRS-14.3:** User will be able to receive notification of discounts via email when they are registered.
- **SRS-14.4:** If the total bill of user exceeds ten thousand and above user will get discount.

FE15: Schedule delivery

- **SRS-15.1:** User will be able to schedule their delivery and set date, time, and month after purchasing product.
- **SRS-15.2:** User will be able to change set date, time and month.
- **SRS-15.3:** User will be able to delete set date, time and month by reset button.
- **SRS-15.4:** System will save user information in user's respective database.
- **SRS-15.5:** User can add their location for dispatching of order.
- **SRS-15.6:** System will display message your delivery is confirmed at this specific date.
- **SRS-15.7:** System will display interface of scheduling delivery after user select option of scheduling delivery.
- **SRS-15.8:** System will display calendar to user for choosing date, month and clock to select time.

FE16: Daily flash sales

- **SRS-16.1:** System will facilitate the user with daily flash sales with large discount.
- **SRS-16.2:** User will be able view which products are selling out faster.
- **SRS-16.3:** System will notify users through emails, and countdown time will start when the email will be sent to user.
- **SRS-16.4:** User will be able to view products on which daily flash sale is applicable.

FE17: Different language support

- **SRS-17.1:** User can change system language according to their choice.
- **SRS-17.2:** User will be able find language support option in setting and system shall display page of language support to user.

- **SRS-17.3:** System will display options for user to choose language such as English and Urdu and user shall be able to select the language of their own choice.
- **SRS-17.4:** System will ask user if they are you sure you want to apply this language and will display option to user yes or no.
- **SRS-17.5:** Language will be applied to the whole system and system language will be changed accordingly.
- **SRS-17.6:** User can select one language at time and can change it again and again.

FE18: App privacy

- **SRS-18.1:** User will be able to select to edit the profile.
- **SRS-18.2:** User will be able to select privacy setting to make changes.
- **SRS-18.3:** System will display the interface according to privacy setting.
- **SRS-18.4:** System will provide user option to not to view the profile to everyone but only to me such a phone number, password and email.
- **SRS-18.5:** User will be able to select the save option.
- **SRS-18.6:** System will display the message that privacy setting update successfully.

FE19: Set up profile

- **SRS-19.1:** User will be able to add profile in their account such as adding biography.
- **SRS-19.2:** User will be able to given option of privacy to not show profile settings to anyone.
- **SRS-19.3:** User will be able select set up profile option from settings in app.
- **SRS-19.4:** User will be able to update email and contact information.
- **SRS-19.5:** System will save users updated information.
- **SRS-19.6:** User will be able to change profile at any time.
- **SRS-19.7:** User will be able to delete profile.
- **SRS-19.8:** User will be able to import profile photos from gallery of phone or computer.
- **SRS-19.9:** System will provide users with the option of using a camera to upload photo.

FE20: Image zoom option

- **SRS-20.1:** User will be able to zoom in and zoom out images of products for high visibility.
- **SRS-20.2:** User will be able to view 3D effects of images.
- **SRS-20.3:** User will be able to view all the sides of images and shall be able to zoom it.

- **SRS-20.4:** System will allow user to view zoom in and zoom out images.
- **SRS-20.5:** Not only images can be zoomed in from mobile but also from web browser through zoom in option provided by system.
- **SRS-20.6:** A plus sign would indicate image zoom in and minus would indicate zoom out.
- **SRS-20.7:** The percentage of zoom in and zoom out images should be shown by the system.
- **SRS-20.8:** A slider as well as button should be provided by system for zoom images.

FE21: Selling product

- **SRS-21.1**: User will be able to sell products at individual level (selling products less than 40) and at professional level (selling products more than 40).
- **SRS-21.2**: User will be able to enter their details in selling product form such as valid account number, government issued national ID, tax information and phone number.
- **SRS-21.3**: User will be able to delete their details from the form.
- **SRS-21.4**: System will verify information entered by user.
- **SRS-21.5**: User will be able to pay fees in application through credit card while selling a product.
- **SRS-21.6**: User will be able to list their product on application which includes information about product name and product description.

FE22. Prime offers

- **SRS-22.1**: System will facilitate the user that have purchased products of more than rupees fifty thousand in MFAS access to membership of prime offer.
- **SRS-22.2:** User will be able to view TV shows, music's, movies, and read thousands of books.
- SRS-22.3: Prime membership will provide user free two-day shipping offer.
- **SRS-22.4**: User will be able to provide feedback and rating to all TV shows, music's, movies, and books.

FE23.Track old history

- **SRS-23.1:** User will be able to view all the history of products they have purchased and searched.
- **SRS-23.2:** User will be able to delete all history of products.

- **SRS-23.3:** System will ask user that are you sure you want to delete this product.
- **SRS-23.4:** System will save all the history of user according to date and time.

FE24: Different categories of product

- **SRS-24.1:** User will be able to view all the categories of products such as sports, gaming, books and clothes, medicines etc.
- **SRS-24.2:** User will be able to view all the popular categories of products.
- **SRS-24.3:** User will be able to view all the discounts on new categories displayed.
- **SRS-24.4:** User will be able to select category and system will display all the available products of that category.
- **SRS-24.5:** System will display all the information related to that category of product such as price, rating, type, payment method for purchasing it.

FE25: Help Centre

- **SRS-25.1:** User will be able to find a website on home page.
- **SRS-25.2:** User will be able to reach management via contact information (official number and email).
- **SRS-25.3:** System will be given different options of help user will select any option.
- **SRS-25.4:** System will provide all guides to user whenever user asks for help.

FE26: Update notification to user

- **SRS-26.1:** System will need to be updated and it will send notification email to user.
- **SRS-26.2:** User will be able to receive a notification email to update system.
- **SRS-26.3:** After receiving notification of update user will be able to click on it.
- **SRS-26.4:** When user click system will take some time and update it.

FE27: Multiple Search option

- **SRS-27.1:** On the home page there is the option of search bar.
- **SRS-27.2:** System will give different search options to user.
- **SRS-27.3:** User will be able to search products by audio.
- **SRS-27.4:** User will be able to search different products by category or brand.
- **SRS-27.5:** When user search any product System will display all products related to search.

FE28: Top-up and travel

- **SRS-28.1:** System will provide travel packages of different cities and countries with discounts.
- **SRS-28.2:** User will be able to book travel packages with discount.
- **SRS-28.3:** User will be able to have entertainment through games.
- **SRS-28.4:** System will provide different options (i.e., games, e-learning, books reading packages).
- **SRS-28.5:** User will be able to also option of e learning.
- **SRS-28.6:** User will be able to play games and make coins.

FE29: Utility bill payment

- **SRS-29.1:** User will be able to select the type of utility bill.
- **SRS-29.2:** System will provide multiple payment options to users for paying bills such as credit card and easy paisa.
- **SRS-29.3:** User will be able to choose one option and the system will display relevant interface of that payment method.
- **SRS-29.4:** User will be able to enter account number in any of the payment methods and submit it to system.
- **SRS-29.5:** System will validate details entered by user and display message payment successfully done.
- **SRS-29.6:** User will be able to remove option of bill and select another one.
- **SRS-29.7:** User will upload image of bill for verification by system.

FE30. Mobile load

- **SRS-30.1:** System will facilitate the user with mobile recharge option.
- **SRS-30.2:** User will be able to add their phone number.
- **SRS-30.3:** System will provide the option to user to select their package to load.
- SRS-30.4: System will facilitate the user to choose preferred payment method.
- **SRS-30.5:** System will display the confirmation message on user's number that package has been loaded successfully.

FE31.Shopping list

- **SRS-31.1:** User will be able to add products in shopping list.
- **SRS-31.2:** System will show shopping list to user.
- **SRS-31.3:** User will be able to delete products from shopping list from reset button.

FE32. Create ads

- **SRS-32.1:** User will be able to create advertisement for their product for free on app to sell it faster.
- **SRS-32.2:** User will be able to post their advertisement on app.
- **SRS-32.3:** User will be able to create multiple advertisements on app.
- **SRS-32.4:** User will be able provide information about advertisement such as product category, name, image of product, contact information and an attractive title for advertisement.
- **SRS-32.5:** User will be able to select category of product to post its advertisement.
- **SRS-32.6:** System will display message advertisement posted successfully.
- **SRS-32.7:** This step is optional for users while selling products.

FE33: History based product recommendation

- **SRS-33.1:** User shall be able to search the product by entering its name, brand or any category and it will be saved by system.
- **SRS-33.2:** When the user searches again products will be recommended to user based upon their previous search.
- **SRS-33.3:** User shall be able to delete all the history of previous searches by reset button.
- **SRS-33.4:** System will ask user are you sure you want to delete all history and system shall display user an option to choose yes or no.
- **SRS-33.5:** User shall be able to select the products of their previous search.

FE34. Manage Stock

- **SRS-34.1:** Admin shall be able to add multiple stocks to the system.
- **SRS-34.2:** If stock is not available admin will contact seller for more stock and update it to system accordingly.
- **SRS-34.3:** Admin will remove stock from system.
- **SRS-34.4:** System will ask admin that are you sure you want to remove stock.
- **SRS-34.5:** System will save stock in database of admin.

FE35. Progress Bar

SRS-35.1: System will display green color of progress bar when user has completed 1 step of purchasing product otherwise color will remain white of progress bar.

- **SRS-35.2:** When User will be able to purchase product. System will show numbering on progress bar.
- **SRS-35.3:** System will display a message that user has completed their order when progress bar is 100 % completed.

FE36. Yearly Shopping Report

- **SRS-36.1:** User will be able to view the yearly data of all the orders.
- **SRS-36.2:** User will be able to delete product the yearly data of all the orders.
- **SRS-36.3:** User will be able to search product the yearly data of all the orders.
- **SRS-36.4:** System will display the date and time when user has ordered product.
- **SRS-36.5:** System will display which product has sale the most in that year.
- **SRS-36.6:** User shall be able to reset orders in ascending and descending order with respect to price.

FE37. Shopping list product recommendation

- **SRS-37.1:** User will be able to add new product.
- **SRS-37.2:** System will display all the products list which user has entered before in shopping list.
- **SRS-37.3:** User shall be able to change product name in shopping cart.
- **SRS-37.4:** When user will enter product in shopping list system shall display user all the images of products and their information.

Artifact-6 Requirements Traceability Matrix

SRS NO.	DESCRIPTION	SOURCE	Designation/ Department	PRIORIY	USE CASE #ID	TEST CASE #ID
SRS-1.1	User will be able to register into system and system will display registration page to user.	Mr. Ali	Administrati on dept.	High	UC-01	TC-1.
SRS-1.2	User will be able to enter the information in the text fields provided by system such as email, phone number, password and username.	Mr. Abbas	Administrati on dept.	High	UC-01	TC-2.
SRS-1.3	System will guide the user such that suggest them for using strong password and provide suggested email id and phone number format.	Mr. Usman	Administrati on dept.	High	UC-01	TC-3.
SRS-1.4	User will be able to enter minimum 8 digits and maximum 12 digits password.	Mr. Abbas	Administrati on dept.	High	UC-01	TC-4.
SRS-1.5	User will be able to submit all the details to system and the detail of the user will be saved in the respective user database.	Mr. Ali, Abbas	Administrati on dept.	High	UC-01	TC-5.
SRS-1.6	System will send verification code to users email for verifying password.	Mr. Bilal	Management dept.	High	UC-01	TC-6.
SRS-1.7	User will be able to enter the six-digit code and system shall send confirmation email to user about successful registration in system.	Mr. Bilal	Management dept.	High	UC-01	TC-7.
SRS-1.8	User will not be able to register in system if their details will be invalid.	Mr. Ali	Administrati on dept.	High	UC-01	TC-8.
SRS-2.1	System will display login page to user and then user shall be able to enter the information in the text fields such as email and password.		Administrati on dept.	High	UC-02	TC-9.
SRS-2.2	User will be able to submit details to system for login and system shall save all the users details in user respective database.	Mr. Usman	Administrati on dept.	High	UC-02	TC-10.
SRS-2.3	Admin will able to also login into system by entering valid credentials such as email or password and system will save admin details in database.	Mr. Zain	Management dept.	High	UC-02	TC-11.
SRS-2.4	After successful login system will	Mr. John	Management	Medium	UC-02	TC-12.

	display the login interface to users and admin.		dept.			
SRS-2.5	If password or e-mail id will be wrong, users won't be able to access their account and system will display invalid email/password.	Mr. Zain	Management dept.	High	UC-02	TC-13.
SRS-2.6	If user wants to reset password, then they shall be able to send request to system.	Mr. Bilal	Management dept.	High	UC-02	TC-14.
SRS-2.7	Password will be updated when the system approves the password change request.	Mr. John	Management dept.	High	UC-02	TC-15.
SRS-2.8	System will provide two methods (i.e. email or phone number) for user account verification.	Mr. Bilal	Management dept.	High	UC-02	TC-16.
SRS-2.9	System will send verification code to user in email or phone number and user shall be able to enter code.	Mr. Bilal	Management dept.	High	UC-02	TC-17.
SRS-2.10	System will display interface of new and confirm password and user shall be able to submit new password to system.	Mr. Bilal	Management dept.	High	UC-02	TC-18.
SRS-2.11	System will facilitate user to save new password.	Mr. Bilal	Management dept.	High	UC-02	TC-19.
SRS-3.1	After registering into system, user will be able to go to the settings option and select QR code scanner.	Mr. Bilal, Zain	Management dept.	Low		TC-20.
SRS-3.2	System will display interface of code and user will be able to open built in camera of mobile.	Miss Sana	Registered customer	Low		TC-21.
SRS-3.3	System will automatically scan code and application will be opened in web.	Mr. Ali	Administrati on dept.	Low		TC-22.
SRS-3.4	User will be able to login in system via QR code until user logouts form application.	Mr. Zain	Management dept.	Low		TC-23.
SRS-3.5	Whenever user will use this QR code system will generate new code for user.	Mr. Bilal	Management dept.	Low		TC-24.
SRS-4.1	User will be able to search product name on search bar.	Miss Sana	Registered customer	Medium		TC-25.
SRS-4.2	User will be able to run different tools such as helium10 on application.	Miss Sana	Registered customer	Medium		TC-26.
SRS-4.3	System will load and tool will be run	Mr. John	Management	Medium		TC-27.

	on system.		dept.			
SRS-4.4	System will display multiple products keyword when user will search any product.	Mr. John	Management dept.	Medium		TC-28.
SRS-4.5	User will be able to search great variety of product.	Miss Sana	Registered customer	Medium		TC-29.
SRS-5.1	User will be able to search product by entering the name of product, its brand name or any category of product.	Miss Sana	Registered customer	High	UC-03	TC-30.
SRS-5.2	User will be able to select a product and place order of it.	Miss Sana	Registered customer	High	UC-03	TC-31.
SRS-5.3	User will be able to enter details of product and system will verify details.	Miss Sana	Registered customer	High	UC-03	TC-32.
SRS-5.4	User will be able to provide delivery information and fill form of shipping details which will include address, phone number, email, name of user.	Miss Noor	Registered customer	High	UC-03	TC-33.
SRS-5.5	User will be able choose the payment method such as cash on delivery, easy paisa and credit card.	Miss Noor	Registered customer	High	UC-03	TC-34.
SRS-5.6	System will display interface of particular payment mode and user shall be able to enter the details such as account number.	Miss Noor	Registered customer	High	UC-03	TC-35.
SRS-5.7	System will be able to generate total bill.	Mr. John	Management dept.	High	UC-03	TC-36.
SRS-5.8	User will be able to receive the order confirmation.	Mr. John	Management dept.	High	UC-03	TC-37.
SRS-6.1	System will display home page to user which will include search bar.	Mr. Zain	Management dept.	Medium	UC-04	TC-38.
SRS-6.2	User will be able to search product by entering the name of product, its brand name or any category of product.	Miss Aliya	Registered customer	Medium	UC- 04,UC- 05	TC-39.
SRS-6.3	System will display all the available products user has searched according to name, its brand and category.	Mr. Bilal	Management dept.	Medium	UC- 04,UC- 05	TC-40.
SRS-6.4	User will be able to select required product and system will display image of that selected product.	Miss Aliya	Registered customer	Medium	UC-04	TC-41.
SRS-6.5	System will also show the details of selected product including name, price, brand, quantity, color, size, total stock availability and rating of that product.	Mr. Zain	Management dept.	Medium	UC-04	TC-42.
SRS-6.6	System will give an option to add the	Mr. Zain	Management	Medium	UC-04	TC-43.

	product to the cart.		dept.			
SRS-6.7	User will be able to chat with the seller and can take more detailed information about that selected product such as user want to see live video of that product.	Mr. Zain	Registered customer	Medium	UC-04	TC-44.
SRS-7.1	User will be able to view product from online shopping cart at any time.	Miss Maria	Registered customer	High	UC-11	TC-45.
SRS-7.2	User will be able to add product to online shopping cart.	Miss Maria	Registered customer	High	UC-11	TC-46.
SRS-7.3	User will be able to remove product from online shopping cart.	Miss Ayesha	Registered customer	High	UC-11	TC-47.
SRS-7.4	User will be able to buy product from online shopping cart.	Miss Ayesha	Registered customer	High	UC-11	TC-48.
SRS-7.5	User will be able to start their checkout from online shopping cart.	Miss Maria	Registered customer	Medium	UC-11	TC-49.
SRS-7.6	User will be able to apply filters to cart so that products will be displayed in cart according to ascending and descending order with respect to price of product.	Miss Sara	Registered customer	Medium	UC-11	TC-50.
SRS-7.7	There should be reset button in cart so that user shall be able to empty online shopping cart.	Miss Sara	Registered customer	High	UC-11	TC-51.
SRS-7.8	System will ask user are you sure you want to delete items.	Miss Maryam	Management dept.	High	UC-11	TC-52.
SRS-7.9	User will be able to change amount of products in online shopping cart.	Miss Sara	Registered customer	High	UC-11	TC-53.
SRS-7.10	User will be able to save items in cart according to date to prevent adding products in cart again and again the same day as date will be saved by system.	Miss Sara	Registered customer	High	UC-11	TC-54.
SRS-8.1	User will be able to select multiple payment methods such as jazz cash, easy paisa, credit card and cash on delivery.	Miss Sara	Registered customer	High	UC-08 ,UC- 09,UC- 10	TC-55.
SRS-8.2	System will display interface according to chosen method.	Mr. John	Management dept.	High	UC-08	TC-56.
SRS-8.3	User will be able to view the payment modes.	Miss Sara	Registered customer	High	UC-08	TC-57.
SRS-8.4	User can also choose any method and	Miss Sara	Registered	Medium	UC-08	TC-58.

	provide its details accordingly.		customer			
SRS-8.5	User will be able to select one payment mode at a time.	Miss Amina	Registered customer	Medium	UC-08	TC-59.
SRS-8.6	When user will select one payment mode total bill will be displayed by system.	Miss Amina	Registered customer	Low	UC-08	TC-60.
SRS-8.7	User will be able to enter account number in each of the mode and system will verify details.	Miss Amina	Registered customer	Medium	UC-08	TC-61.
SRS-8.8	System will display message payment done successfully.	Mr. John	Management dept.	High	UC-08	TC-62.
SRS-9.1	User will be able to contact seller to ask information about product.	Miss Maria	Registered customer	Low		TC-63.
SRS-9.2	System will display option to user to chat with seller.	Miss Maryam	Management dept.	Low		TC-64.
SRS-9.3	System will provide live video and voice call to communicate with seller.	Miss Maryam	Management dept.	Low		TC-65.
SRS-9.4	System will display type of questions to user when contacting seller.	Miss Maryam	Management dept.	Low		TC-66.
SRS-10.1	System shall display all the respective coins and their days in which coin can be claimed by user.	Mr. John	Management dept.	Low		TC-67.
SRS-10.2	User shall be able to claim coins by checking-in daily for 7 days and on the 7 th day user shall have the biggest reward such as buy one product and get one free.	Miss Sana	Registered customer	Low		TC-68.
SRS-10.3	Once the coin has been claimed by user it cannot be claimed again.	Mr. John	Management dept.	Low		TC-69.
SRS-10.4	When user will collect all coins, they will be automatically converted into discount vouchers by system.	Mr. John	Management dept.	Low		TC-70.
SRS-10.5	When user will purchase any product this discount shall be applied to it thus reducing total cost of product.	Mr. John	Management dept.	Low		TC-71.
SRS-10.6	This discount shall be applied to all the products user will purchased on that day.	Mr. John	Management dept.	Low		TC-72.
SRS-10.7	This total discount shall be not be applied after the given 7 days are over. After that process of coins will be reset by system.	Mr. John	Management dept.	Low		TC-73.
SRS-11.1	System will facilitate the user to	Miss	Management	Medium		TC-74.

	replace the product of poor quality.	Maryam	dept.			
SRS-11.2	System will display interface of return items and user shall be able to fill the return form which will includes details such as order number, tracking number, name of the product and type and delivery information.	Miss Maryam	Management dept.	Medium		TC-75.
SRS-11.3	User will replace products within 7 days after purchasing the product.	Miss Sara	Registered customer	Medium		TC-76.
SRS-11.4	After 7 days the replace option will be not accessible to users.	Miss Maryam	Management dept.	Medium		TC-77.
SRS-12.1	User will be able to provide feedback when they received the order and also about the application.	Miss Amina	Registered customer	Medium	UC-15	TC-78.
SRS-12.2	User will be able to give their review about the size, quality, and color of the product.	Miss Noor	Registered customer	Medium	UC-15	TC-79.
SRS-12.3	User will be able to provide multiple feedbacks and system will save the feedback in database.	Mr. Ali	Registered customer	Medium	UC-15	TC-80.
SRS-12.4	User will be able to delete feedback added through a reset button.	Mr. Ali	Registered customer	Medium	UC-15	TC-81.
SRS-12.5	System will ask user are you sure you want to delete feedback.	Mr. Usman	Administrati on dept.	Medium	UC-15	TC-82.
SRS-12.6	Options will be given to user that what kind of response they will give in feedback such as excellent, poor and good.	Mr. Bilal	Management dept.	Medium	UC-15	TC-83.
SRS-13.1	User will be able to go to settings option and select my orders.	Miss Noor	Registered customer	Medium		TC-84.
SRS-13.2	User will be able to see their previous order that they have top review.	Miss Noor	Registered customer	Medium		TC-85.
SRS-13.3	System will display interface according to chosen order.	Mr. Zain	Management dept.	Medium		TC-86.
SRS-13.4	Rating is based on five stars with one being the lowest and five being the highest. User will be able to give rating to the seller.	Miss Noor	Registered customer	Medium		TC-87.
SRS-13.5	System will save the rating in database.	Mr. Ali	Administrati on dept.	Medium		TC-88.
SRS-13.6	User will be able to delete rating through a reset button.	Miss Noor	Registered customer	Medium		TC-89.
SRS-13.7	System will ask user are you sure you	Miss	Management	Medium		TC-90.

	want to delete rating.	Maryam	dept.			
SRS-13.8	User will be able to provide one rating at a time when login from one email.	Miss Maryam	Management dept.	Medium		TC-91.
SRS-14.1	System shall provide user discounts on specific brand.	Mr. Zain	Management dept.	Medium	UC-13	TC-92.
SRS-14.2	User shall be able to view all discounts.	Mr. Abbas	Administrati on dept.	Medium	UC-13	TC-93.
SRS-14.3	User shall be able to receive notification of discounts via email when they are registered.	Miss Maria	Registered customer	Medium	UC-13	TC-94.
SRS-14.4	If total bill of user exceeds ten thousand and above user will get discount.	Mr. Bilal	Management dept.	Medium	UC-13	TC-95.
SRS-15.1	User will be able to schedule their delivery and set date, time and month after purchasing product.	Miss Noor	Registered customer	High	UC-14	TC-96.
SRS-15.2	User will be able to change set date, time and month.	Miss Noor	Registered customer	High	UC-14	TC-97.
SRS-15.3	User will be able to delete set date, time and month by reset button.	Miss Noor	Registered customer	High	UC-14	TC-98.
SRS-15.4	System will save user information in user's respective database.	Mr. Usman	Administrati on dept.	High	UC-14	TC-99.
SRS-15.5	User can add their location for dispatching of order.	Miss Amina	Registered customer	High	UC-14	TC-100.
SRS-15.6	System will display message your delivery is confirmed at this specific date.	Miss Maryam	Management dept.	High	UC-14	TC-101.
SRS-15.7	System will display interface of scheduling delivery after user select option of scheduling delivery.	Mr. Bilal	Management dept.	High	UC-14	TC-102.
SRS-15.8	System will display calendar to user for choosing date, month and clock to select time.	Mr. Zain	Management dept.	High	UC-14	TC-103.
SRS-16.1	System will facilitate the user with daily flash sales with large discount.	Miss Maryam	Management dept.	Medium	UC-13	TC-104.
SRS-16.2	User will be able view which products are selling out faster.	Miss Maryam	Management dept.	Medium	UC-13	TC-105.
SRS-16.3	System will notify users through emails, and countdown time will start when the email will be sent to user.	Miss Noor	Registered customer	Medium	UC-13	TC-106.
SRS-16.4	User will be able to view products on which daily flash sale is applicable.	Miss Noor	Registered customer	Medium	UC-13	TC-107.

CDC 17.1	User can change system language	Miss Noon	Registered	III: ada	TC-108.
SRS-17.1	according to their choice.	Miss Noor	customer	High	
SRS-17.2	User will be able find language support option in setting and system shall display page of language support to user.	Miss Noor	Registered customer	High	TC-109.
SRS-17.3	System will display options for user to choose language such as English and Urdu and user shall be able to select the particular language of their own choice.	Miss Maryam, Mr. John	Management dept.	High	TC-110.
SRS-17.4	System will ask user that are you sure you want to apply this language and will display option to user yes or no.	Mr. Bilal	Management dept.	High	TC-111.
SRS-17.5	Language will be applied to whole system and system language will be change accordingly.	Mr. Zain	Management dept.	High	TC-112.
SRS-17.6	User can select one language at time and can change it again and again.	Miss Noor	Registered customer	High	TC-113.
SRS-18.1	User will be able to select to edit the profile.	Miss Noor	Registered customer	High	TC-114.
SRS-18.2	User will be able to select privacy setting to make changes.	Miss Noor	Registered customer	High	TC-115.
SRS-18.3	System will display the interface according to privacy setting.	Miss Maryam	Management dept.	High	TC-116.
SRS-18.4	System will provide user option to not to view the profile to everyone but only to me such a phone number, password and email.	Miss Maryam	Management dept.	High	TC-117.
SRS-18.5	User will be able to select the save option.	Miss Sana	Registered customer	High	TC-118.
SRS-18.6	System will display the message that privacy setting update successfully.	Mr. Zain	Management dept.	High	TC-119.
SRS-19.1	User will be able to add profile in their account such as adding biography.	Miss Sana	Registered customer	High	TC-120.
SRS-19.2	User will be able to given option of privacy to not show profile settings to anyone.	Miss Sana	Registered customer	High	TC-121.
SRS-19.3	User will be able select set up profile option from settings in app.	Miss Sana	Registered customer	High	TC-122.
SRS-19.4	User will be able to update email and contact information.	Miss Sana	Registered customer	High	TC-123.
SRS-19.5	System will save users updated information.	Miss Maryam	Management dept.	High	TC-124.
SRS-19.6	User will be able to change profile at	Miss Sana	Registered	High	TC-125.

	any time.		customer		
SRS-19.7	User will be able to delete profile.	Miss Sana	Registered customer	High	TC-126.
SRS-19.8	User will be able to import profile photos from gallery of phone or computer.	Miss Sana	Registered customer	High	TC-127.
SRS-19.9	System will provide users option of using camera to upload photo.	Mr. Zain	Management dept.	High	TC-128.
SRS-20.1	User will be able to zoom in and zoom out images of products for high visibility.	Miss Sana	Registered customer	High	TC-129.
SRS-20.2	User will be able to view 3D effect of images.	Miss Sana	Registered customer	High	TC-130.
SRS-20.3	User will be able to view all the sides of images and shall be able to zoom it.	Miss Sana	Registered customer	High	TC-131.
SRS-20.4	System will allow user to view zoom in and zoom out images.	Mr. Ali	Administrati on dept.	High	TC-132.
SRS-20.5	Not only images can be zoom in from mobile but also from web browser through zoom in option provided by system.	Mr. Usman	Administrati on dept.	High	TC-133.
SRS-20.6	A plus sign would indicate image zoom in and minus would indicate zoom out.	Miss Maryam	Management dept.	High	TC-134.
SRS-20.7	The percentage of zoom in and zoom out images should be shown by system.	Miss Maryam	Management dept.	High	TC-135.
SRS-20.8	A slider as well as button should be provided by system for zoom images.	Mr. Abbas	Administrati on dept.	High	TC-136.
SRS-21.1	User will be able to sell products at individual level (selling products less than 40) and at professional level (selling products more than 40).	Miss Sana	Registered customer	High	TC-137.
SRS-21.2	User will be able to enter their details in selling product form such as valid account number, government issued national ID, tax information and phone number.	Miss Sana	Registered customer	High	TC-138.
SRS-21.3	User will be able to delete their details in the form.	Miss Sana	Registered customer	High	TC-139.
SRS-21.4	System will verify information entered by user.	Mr. John	Management dept.	High	TC-140.
SRS-21.5	User will be able to pay fees in	Miss Noor	Registered	High	TC-141.

	application through credit card while selling a product.		customer			
SRS-21.6	User will be able to list their product on application which includes information about product name and product description.	Miss Noor	Registered customer	High		TC-142.
SRS-22.1	System will facilitate the user that have purchased products of more than rupees fifty thousand in MFAS access to membership of prime offer.	Mr. Ali	Administrati on dept.	Medium	UC-13	TC-143.
SRS-22.2	User will be able to view TV shows, music's, movies, and read thousands of books.	Miss Sana	Registered customer	Medium	UC-13	TC-144.
SRS-22.3	Prime membership shall provide user free two-day shipping offer.	Miss Maryam	Management dept.	Medium	UC-13	TC-145.
SRS-22.4	User will be able to provide feedback and rating to all TV shows, music's, movies and books.	Miss Sana	Registered customer	Medium	UC-13	TC-146.
SRS-23.1	User will be able to view all the history of products they have purchased and searched.	Miss Noor	Registered customer	Medium		TC-147.
SRS-23.2	User will be able to delete all history of products.	Miss Sana	Registered customer	Medium		TC-148.
SRS-23.3	System will ask user that are you sure you want to delete this product.	Mr. Usman	Administrati on dept.	Medium		TC-149.
SRS-23.4	System will save all the history of user according to date and time.	Mr. Ali	Administrati on dept.	Medium		TC-150.
SRS-24.1	User will be able to view all the categories of products such as sports, gaming, books and clothes, medicines etc.	Miss Sana	Registered customer	High		TC-151.
SRS-24.2	User will be able to view all the popular categories of products.	Miss Sana	Registered customer	High		TC-152.

SRS-24.3	User will be able to view all the discounts on new categories displayed.	Miss Sana	Registered customer	High	TC-153.
SRS-24.4	User will be able to select category and system will display all the available products of that category.	Miss Sana	Registered customer	High	TC-154.
SRS-24.5	System will display all the information related to that category of product such as price, rating, type, payment method for purchasing it.	Mr. Abbas	Administrati on dept.	High	TC-155.
SRS-25.1	After login user will be able to find a website on home page.	Miss Noor	Registered customer	High	TC-156.
SRS-25.2	User will be able to reach management via contact information (official number and email).	Miss Noor	Registered customer	High	TC-157.
SRS-25.3	System will be given different options of help user will select any option.	Mr. John	Management dept.	High	TC-158.
SRS-25.4	System will provide all guides to user whenever user ask for help.	Mr. Abbas	Administrati on dept.	High	TC-159.
SRS-26.1	System will need to be update it will send notification email to user.	Mr. Bilal	Management dept.	Low	TC-160.
SRS-26.2	User will be able to receive a notification email to update system.	Miss Noor	Registered customer	Low	TC-161.
SRS-26.3	After receiving notification of update user will be able to click on it.	Miss Noor	Registered customer	Low	TC-162.
SRS-26.4	When user click system will take some time and update it.	Mr. Zain	Management dept.	Low	TC-163.
SRS-27.1	After login on the home page there is option of search bar.	Miss Noor	Registered customer	High	TC-164.

	System will gave different search				TC-165.
SRS-27.2	options to user.	Mr. John	Management dept.	High	
SRS-27.3	User will be able to search products by audio.	Miss Noor	Registered customer	High	TC-166.
SRS-27.4	User will be able to search different products by category or brand.	Miss Noor	Registered customer	High	TC-167.
SRS-27.5	When user search any product System will display all products related to search.	Miss Maryam	Management dept.	High	TC-168.
SRS-28.1	System will provide travelling packages of different cities and countries with discount.	Mr. Usman	Administrati on dept.	Medium	TC-169.
SRS-28.2	User will be able to book travelling packages with discount.	Miss Noor	Registered customer	Medium	TC-170.
SRS-28.3	User will be able to have entertainment through games and videos.	Miss Noor	Registered customer	Medium	TC-171.
SRS-28.4	User will be able to also option of e learning.	Miss Noor	Registered customer	Medium	TC-172.
SRS-28.5	User will be able to play games and make coins.	Miss Noor	Registered customer	Medium	TC-173.
SRS-29.1	User will be able to select the type of utility bill.	Miss Noor	Registered customer	Medium	TC-174.
SRS-29.2	System will provide multiple payment options to users for paying bill such as credit card and easy paisa.	Miss Maryam	Management dept.	Medium	TC-175.
SRS-29.3	User will be able to choose one option and system will display relevant interface of that payment method.	Miss Maryam	Management dept.	Medium	TC-176.

SRS-29.4	User will be able to enter account number in any of the payment method and submit it to system.	Miss Maryam	Management dept.	Medium	TC-177.
SRS-29.5	System will validate details entered by user and display message payment successfully done.	Mr. Abbas	Administrati on dept.	Medium	TC-178.
SRS-29.6	User will be able to remove option of bill and select another one.	Miss Maria	Registered customer	Medium	TC-179.
SRS-29.7	User will upload image of particular bill for verification by system.	Miss Maria	Registered customer	Medium	TC-180.
SRS-30.1	System will facilitate the user with mobile recharge option.	Mr. Usman	Administrati on dept.	Medium	TC-181.
SRS-30.2	User will be able to add their phone number.	Miss Maria	Registered customer	Medium	TC-182.
SRS-30.3	System will provide option to user to select their package to load.	Mr. Zain	Management dept.	Medium	TC-183.
SRS-30.4	System will facilitate the user to choose preferred payment method.	Mr. Bilal	Management dept.	Medium	TC-184.
SRS-30.5	System will display the confirmation message on user's number that package has been loaded successfully.	Mr. Ali	Administrati on dept.	Medium	TC-185.
SRS-31.1	User will be able to add products in shopping list.	Miss Maria	Registered customer	High	TC-186.
SRS-31.2	System will show shopping list to user.	Mr. Abbas	Administrati on dept.	High	TC-187.
SRS-31.3	User will be able to delete products from shopping list from reset button.	Miss Maria	Registered customer	High	TC-188.

	User will be able to create) (i	D 1 1		TC-189.
SRS-32.1	advertisement for their product for free on app to sell it faster.	Miss Maria	Registered customer	High	
SRS-32.2	User will be able to post their advertisement on app.	Miss Maria	Registered customer	High	TC-190.
SRS-32.3	User will be able to create multiple advertisements on app.	Miss Maria	Registered customer	High	TC-191.
SRS-32.4	User will be able provide information about advertisement such as product category, name, image of product, contact information and an attractive title for advertisement.	Miss Maria	Registered customer	High	TC-192.
SRS-32.5	User will be able to select category of product to post its advertisement.	Miss Maria	Registered customer	High	TC-193.
SRS-32.6	System will display message advertisement posted successfully.	Mr. Abbas	Administrati on dept.	High	TC-194.
SRS-32.7	This step is optional for users while selling products.	Mr. Usman	Administrati on dept.	High	TC-195.
SRS-33.1	User shall be able to search the product by entering its name, brand or any category and it will be saved by system.	Miss Maria	Registered customer	High	TC-196.
SRS-33.2	When user will search again products will be recommended to user based upon their previous search.	Mr. John	Management dept.	High	TC-197.
SRS-33.3	User shall be able to delete all the history of previous searches by reset button.	Miss Maria	Registered customer	High	TC-198.
SRS-33.4	System will ask user are you sure you want to delete all history and system shall display user an option to choose yes or no.	Mr. Ali	Administrati on dept.	High	TC-199.

	User shall be able to select the	Miss	Dagistanad			TC-200.
SRS-33.5	products of their previous search.	Maria	Registered customer	High		
SRS-34.1	Admin shall be able to add multiple stocks in system.	Mr. Abbas	Administrati on dept.	High	UC-12	TC-201.
SRS-34.2	If stock is not available admin will contact seller for more stock and update it to system accordingly.	Mr. Usman	Administrati on dept.	High	UC-12	TC-202.
SRS-34.3	Admin will remove stock from system.	Mr. Abbas	Administrati on dept.	High	UC-12	TC-203.
SRS-34.4	System will ask admin that are you sure you want to remove stock.	Mr. Ali	Administrati on dept.	High	UC-12	TC-204.
SRS-34.5	System will save stock in database of admin.	Mr. Ali	Administrati on dept.	High	UC-12	TC-205.
SRS-35.1	System will display green color of progress bar when user has completed 1 step of purchasing product otherwise color will remain white of progress bar.	Mr. John	Management dept.	Medium		TC-206.
SRS-35.2	When User will be able to purchase product. System will show numbering on progress bar.	Mr. Abbas	Administrati on dept.	Medium		TC-207.
SRS-35.3	System will display message that user has completed their order when progress bar is 100 % completed.	Mr. Abbas	Administrati on dept.	Medium		TC-208.
SRS-36.1	User will be able to view the yearly data of all the orders.	Miss Maria	Registered customer	High		TC-209.
SRS-36.2	User will be able to delete product the yearly data of all the orders.	Miss Maria	Registered customer	High		TC-210.

SRS-36.3	User will be able to search product the yearly data of all the orders.	Miss Maria	Registered customer	High	TC-211.
SRS-36.4	System will display date and time when user has ordered product.	Mr. John	Management dept.	High	TC-212.
SRS-36.5	System will display which product has sale the most in that year.	Mr. John	Management dept.	High	TC-213.
SRS-36.6	User shall be able to reset orders in ascending and descending order with respect to price.	Miss Maria	Registered customer	High	TC-214.
SRS-37.1	User will be able to add new product.	Miss Maria	Registered customer	High	TC-215.
SRS-37.2	System will display all the products list which user has entered before in shopping list.	Miss Maryam	Management dept.	High	TC-216.
SRS-37.3	User shall be able to change product name in shopping cart.	Miss Maria	Registered customer	High	TC-217.
SRS-37.4	When user will enter product in shopping list system shall display user all the images of products and their information.	Miss Maria	Registered customer	High	TC-218.

Artifact-6 Test Cases

SRS-No.	Requirements Description	Test Data	Expected Result	Actual Result	Pass/ Fail	Test Case -Id
SRS-1.1	User will be able to register into system and system will display registration page to user.	Sign up option selected by user.	Registration page is visible to user.	Registration page is visible to user.	Pass	TC- 01
SRS-1.2	User will be able to enter the information in the text fields provided by system such as email, phone number, password and username.	ahmed@gmail.com, 987654321, abcdefgh, Ahmed	Data entered successfully.	Data entered successfully.	Pass	TC- 02
SRS-1.3	System will guide the user such that suggest them for using strong password and provide suggested email id and phone number format.	Password: abc@123 Email id: ahmed1@gmail.com Phone number:+93 526 8569142	Suggestions displayed for password, email id and phone number.	Suggestions displayed for password, email id and phone number.	Pass	TC- 03
SRS-1.4		I.1. 1234 I.2. Edrfy.?kj	 Display error message. Password created successfully. 	 Display error message. Password created successfully. 	Pass	TC- 04
SRS-1.5	User will be able to submit all the details to system and the detail of the user will be saved in the respective user database.	Ahmed, ahmed1@gmail.com, +93 520 1478529, Edrfy.?kj	Details are saved in the database.	Details are saved in the database.	Pass	TC- 05
SRS-1.6	System will send verification code to users email for verifying password.	Email: ahmed1@gmail.com , Code: 789652	Password verified successfully.	Password verified successfully.	Pass	TC- 06
SRS-1.7	User will be able to enter the six-digit code and system shall send confirmation email to user about successful registration in system.	1. 1234 2. 789654	 Display error message. Registered successfully. 	 Display error message. Registered successfully. 	Pass	TC- 07
SRS-1.8	User will not be able to register in system if their details will be invalid.	ahmed1@gmail.com, Edrfy.?k	1. Invalid password.	1. Invalid password.	Pass	TC- 08
SRS-2.1	System will display login page to user and then user shall be able to enter the information in the text fields such as email and password.	ahmed1@gmail.com, ahmed123	Information entered.	Information entered.	Pass	TC- 09

SRS-2.2	User will be able to submit	ahmed1@gmail.com, ahmed123	Saved in database.	Saved in database.	Pass	TC- 10
	details to system for login and	aearze	dutabase.	adtabase.		
	system shall save all the users					
	details in user respective					
	database.					
SRS-2.3	Admin will able to also login	Ali123@gmail.com,	Saved in	Saved in	Pass	TC-
	into system by entering valid	ali@123	database.	database.		11
	credentials such as email or					
	password and system will save					
	admin details in database.					
SRS-2.4	After successful login system	ahmed1@gmail.com,	Login	Login	Pass	TC-
	will display the login interface	ahmed123	Successfully.	Successfully.		12
	to users and admin.					
SRS-2.5	If password or e-mail id will be	ahmedgmail.com,	Invalid	Invalid	Pass	TC-
	wrong, users won't be able to	Ahmed@!!!	email/password.	email/password.		13
	access their account and					
	system will display invalid					
	email/password.					
	•					
SRS-2.6	If user wants to reset password,	Request to reset	Request sent.	Request sent.	Pass	TC-
	then they shall be able to send	password.				14
	request to system.					
SRS-2.7	Password will be updated	Request to reset	Request approved.	Request	Pass	TC-
	when the system approves the	password.		approved.		15
	password change request.					
SRS-2.8	System will provide two	ahmed1@gmail.com,	Verification email	Verification email	Pass	TC-
	methods (i.e. email or phone		received.	received.		16
	number) for user account					
	verification.					

SRS-2.9	System will send verification	123456	Verified	Verified	Pass	TC-
	code to user in email or phone		Successfully.	Successfully.		17
	number and user shall be able					
	to enter code.					
SRS-2.10	System will display interface	Password: Ali@123	Submitted	Submitted	Pass	TC-
	of new and confirm password	Confirm Password: Ali@123	Successfully.	Successfully.		18
	and user shall be able to submit					
	new password to system.					
SRS-2.11	System will facilitate user to	Password: Ali@123	Saved in database.	Saved in	Pass	TC-
	save new password.			database.		19
SRS-3.1	After registering into system, user will be able to go to the settings option and select QR code scanner.	Select QR code to scan.	QR code selected.	QR code selected.	Pass	TC- 20
SRS-3.2	System will display interface of code and user will be able to open built in camera of mobile.	Fix the camera to scan the QR code.	Pointing the camera at QR code successfully.	Pointing the camera at QR code successfully.	Pass	TC - 21
SRS-3.3	System will automatically scan code and application will be opened in web.	Scan QR code.	Scan QR code successfully.	Scan QR code successfully.	Pass	TC- 22
SRS-3.4	User will be able to login in system via QR code until user logouts form application.	Login in system via QR code. Logout.	 Successfully login saved in database. Again scan QR code. 	Successfully login saved in database. Again scan QR code.	Pass	TC - 23
SRS-3.5	Whenever user will use this QR code system will generate new code for user.	Generate new QR code.	Successfully generate.	Successfully generate.	Pass	TC - 24
SRS-4.1	User will be able to search product name on search bar.	Product name: bag	Search successfully.	Search successfully.	Pass	TC - 25
SRS-4.2	User will be able to run different tools such as helium10 on application.	 Tool: Helium10 Tool: Easy20 	Successfully run. Display error message.	Successfully run. Display error message.	Pass	TC - 26
SRS-4.3	System will load and tool will be run on system.	User: Tool: helium10	Successfully load and tool will be run in system.	Successfully load and tool will be run in system.	Pass	TC- 27
SRS-4.4	System will display multiple	1. Product name: k	1. Display product	1. Display	Pass	TC -

	products keyword when user will search any product	2. Product name:2	starting with k. 2. Display invalid entry.	product starting with k. 2. Display invalid entry.		28
SRS-4.5	User will be able to search great variety of product.	Product name: bag	Display different varieties of bag.	Display different varieties of bag.	Pass	TC - 29
SRS-5.1	User will be able to search product by entering the name of product, its brand name or any category of product.	 Product name: bag Brand name: Gucci. Category: Shoulder bag 	Display product successfully.	Display product successfully.	Pass	TC - 30
SRS-5.2	User will be able to select a product and place order of it.	Product name: bag	 Order place successfully. Order out of stock. 	 Order place successfully. Order out of stock. 	Pass	TC - 31
SRS-5.3	User will be able to enter details of product and system will verify details.	Product name: bag Product brand: Gucci Product color: black Product quantity: 2 Product price: 30000	Details entered and verify Successfully.	Details entered and verify Successfully.	Pass	TC - 32
SRS-5.4	User will be able to provide delivery information and fill form of shipping details which will include address, phone number, email, name of user.	Ahmed, ahmed1@gmail.com, +93 256 987452 G-13 Islamabad.	Shipping form fill successfully.	Shipping form fill successfully.	Pass	TC - 33
SRS-5.5	User will be able choose the payment method such as cash on delivery, easy paisa and credit card.	Credit card.	Selected successfully.	Selected successfully.	Pass	TC- 34
SRS-5.6	System will display interface of particular payment mode and user shall be able to enter the details such as account number.	 Account number: 1100 5236 745896 Account number: 1100 1232 	 Account number entered. Account number is incorrect. 	 Account number entered. Account number is incorrect. 	Pass	TC- 35
SRS-5.7	System will be able to generate total bill.	Quantity*price 2*4000	Generate bill.	Generate bill.	Pass	TC- 36

SRS-5.8	User will be able to receive the order confirmation.	Order number: 987655432	Confirm order.	Confirm order.	Pass	TC- 37
SRS-6.1	System will display home page to user which will include search bar.	Open application.	Display homepage which include search bar.	Display homepage which include search bar.	Pass	TC- 38
SRS-6.2	User will be able to search product by entering the name of product, its brand name or any category of product.	 Product name: bag Brand name: Gucci. Category: Shoulder bag 	Product search successfully by name, brand and category.	Product search successfully by name, brand and category.	Pass	TC- 39
SRS-6.3	System will display all the available products user has searched according to name, its brand and category.	 4. Product name: bag 5. Brand name: Gucci. 6. Category: Shoulder bag 	Product is available.	Product is not available.	Pass	TC- 40
SRS-6.4	User will be able to select required product and system will display image of that selected product.	bag	Display the image of bag.	Display the image of bag.	Pass	TC- 41
SRS-6.5	System will also show the details of selected product including name, price, brand, quantity, color, size, total stock availability and rating of that product.	Product name: bag Product price:30000 Product brand: Gucci Product quantity: 1 Product color: black Product size: medium. Product total stock: 5000 Product rating: 3 stars	Display product details.	Display product details.	Pass	TC- 42
SRS-6.6	System will give an option to add the product to the cart.	Product name: bag Product quantity: 5	Added successfully.	Added successfully.	Pass	TC- 43
SRS-6.7	User will be able to chat with the seller and can take more detailed information about that selected product such as user want to see live video of that product.	Product name: bag Seller name: Ali Product brand: Gucci Product code:8520	Get more detail about product through chat.	Get more detail about product through chat.	Pass	TC- 44

SRS-7.1	User will be able to view product from online shopping cart at any time.	Product name: bag	View product.	View product.	Pass	TC- 45
SRS-7.2	User will be able to add product to online shopping cart.	Product name: bag Product quantity: 5	Add product to cart.	Add product to care.	Pass	TC- 46
SRS-7.3	User will be able to remove product from online shopping cart.	Product name: bag Product quantity: 2	Remove product from cart.	Remove product from cart.	Pass	TC- 47
SRS-7.4	User will be able to buy product from online shopping cart.	Product name: bag Product quantity: 2	Buy product from cart.	Buy product from cart.	Pass	TC- 48
SRS-7.5	User will be able to start their checkout from online shopping cart.	Checkout cart.	Delete product. Update product. View product.	Delete product. Update product. View product.	Pass	TC- 49
SRS-7.6	User will be able to apply filters to cart so that products will be displayed in cart according to ascending and descending order with respect to price of product.	Apply filter.	Bag 2500 Shawl 1800 Shoes 15000 Makeup 1000	Bag 2500 Shawl 1800 Shoes 15000 Makeup 1000	Pass	TC- 50
SRS-7.7	There should be reset button in cart so that user shall be able to empty online shopping cart.	Click to reset button.	Empty cart successfully.	Empty cart successfully.	Pass	TC- 51
SRS-7.8	System will ask user are you sure you want to delete items.	Delete product	Message displayed: Sure you want to delete.	Message displayed: Sure you want to delete.	Pass	TC- 52
SRS-7.9	User will be able to change amount of products in online shopping cart.	Bag Price :1800 New bag price:1500	Price changed successfully.	Price changed successfully.	Pass	TC- 53
SRS-7.10	User will be able to save items in cart according to date to prevent adding products in cart again and again the same day	Bag add to cart on 25-dec-2021	Saved to cart.	Saved to cart.	Pass	TC- 54

	as date will be saved by system.					
SRS-8.1	User will be able to select multiple payment methods such as jazz cash, easy paisa, credit card and cash on delivery.	Option: Easy paisa	Option selected successfully.	Option selected successfully.	Pass	TC- 55
SRS-8.2	System will display interface according to chosen method.	Through debit card	Interface displayed.	Interface displayed.	Pass	TC- 56
SRS-8.3	User will be able to view the payment modes.	Show different payment modes.	 Easy paisa Debit card cash on delivery 	 Easy paisa Debit card cash on delivery 	Pass	TC- 57
SRS-8.4	User can also choose any method and provide its details accordingly.	Jazz cash: 123456789 Price :8000	Details added successfully.	Details added successfully.	Pass	TC- 58
SRS-8.5	User will be able to select one payment mode at a time.	Easy paisa	Payment mode selected.	Payment mode selected.	Pass	TC- 59
SRS-8.6	When user will select one payment mode total bill will be displayed by system.	Easy paisa	Bill displayed.	Bill displayed.	Pass	TC- 60
SRS-8.7	User will be able to enter account number in each of the mode and system will verify details.	Easy Paisa: 123456789 Name: Ahmed	Verify details successfully.	Verify details successfully.	Pass	TC- 61
SRS-8.8	System will display message payment done successfully.	Easy Paisa: 123456789 Price 4000	Payment done Successfully.	Payment done Successfully.	Pass	TC- 62
SRS-9.1	User will be able to contact seller to ask information about product.	Product quality: good Stuff: leather	Information delivered successfully.	Information delivered successfully.	Pass	TC- 63

SRS-9.2	System will display option to user to chat with seller.	Message	Sent successfully.	Sent successfully.	Pass	TC- 64
SRS-9.3	System will provide live video and voice call to communicate with seller.	 Voice call: +96 852 9632584 Live video: +85 789 6541238 	 Voice call is enable. Live video is enable. 	 Voice call is enable. Live video is enable. 	Pass	TC- 65
SRS-9.4	System will display type of questions to user when contacting seller.	Question: What is the quality of product?	Question display successfully.	Question display successfully.	Pass	TC- 66
SRS-10.1	System will display all the respective coins and their days in which coin can be claimed by user.	Coins: 7	Coin claimed.	Coin claimed.	Pass	TC- 67
SRS-10.2	User will be able to claim coins by checking-in daily for 7 days and on the 7 th day user shall have the biggest reward such as buy one product and get one free.	Day 1: 10 Day 2: 20 Day 3: 30 Day 4: 40 Day 5: 50 Day 6: 60 Day 7: 70	Received reward.	Received reward.	Pass	TC- 68
SRS-10.3	Once the coin has been claimed by user it cannot be claimed again.	Claimed coins	Not claimed again.	Not claimed again.	Pass	TC- 69
SRS-10.4	When user will collect all coins, they will be automatically converted into discount vouchers by system	Claimed coins	Received discount vouchers.	Received discount vouchers.	Pass	TC- 70
SRS-10.5	When user will purchase any product this discount shall be applied to it thus reducing total cost of product.	Product price: 30000 Discount: 10%	Received discount.	Received discount.	Pass	TC- 71
SRS-10.6	This discount shall be applied to all the products user will purchased on that day.	Buy product: 5	Discount received.	Discount received.	Pass	TC- 72

SRS-10.7	This total discount shall be not be applied after the given 7 days are over. After that process of coins will be reset by system.	1. Week: 1 2. Week: 2	 Discount received Reset the process of coins. 	 Discount received. Reset the process of coins. 	Pass	TC- 73
SRS-11.1	System will facilitate the user to replace the product of poor quality.	Quality: poor	Replace the product.	Replace the product.	Pass	TC- 74
SRS-11.2	System will display interface of return items and user shall be able to fill the return form which will includes details such as order number, tracking number, name of the product and type and delivery information.	Product name: bag Order number: 0987665543 Tracking number: 87654332 Delivery information: 23 June 2022	Product returned successfully.	Product returned successfully.	Pass	TC- 75
SRS-11.3	User will replace products within 7 days after purchasing the product.	Purchase product: bag Quality: poor Fill return form. Week: 1	Product replace successfully within 7 days.	Product replace successfully within 7 days.	Pass	TC- 76
SRS-11.4	After 7 days the replace option will be not accessible to users.	1. Week: 1 2. Week: 2	Replace successfully. Not replace.	 Replace successfully. Not replace. 	Pass	TC- 77
SRS-12.1	User will be able to provide feedback when they received the order and also about the application.	Received order: Bag	Display feedback option.	Display feedback option.	Pass	TC- 78
SRS-12.2	User will be able to give their review about the size, quality, and color of the product.	Received order: bag Size: medium Quality: good Color: black	Display review.	Display review.	Pass	TC- 79
SRS-12.3	User will be able to provide multiple feedbacks and system will save the feedback in database.	Received order: bag Size: medium Quality: good Color: black Feedback completed	Feedback saved in database.	Feedback saved in database.	Pass	TC- 80
SRS-12.4	User will be able to delete feedback added through a reset button.	Feedback: deleted	Display reset button.	Display reset button.	Pass	TC- 81

SRS-12.5	System will ask user are you sure you want to delete feedback.	Delete: confirm	Delete feedback successfully.	Delete feedback successfully.	Pass	TC- 82
SRS-12.6	Options will be given to user that what kind of response they will give in feedback such as excellent, poor and good.	 Excellent Good Poor 	 Feedback saved in database. Feedback saved in database. Feedback saved in database. feedback saved in database. 	 Feedback saved in database. Feedback saved in database. Feedback saved in database. 	Pass	TC- 83
SRS-13.1	User will be able to go to settings option and select my orders.	Select option: my order	Option selected.	Option selected.	Pass	TC- 84
SRS-13.2	User will be able to see their previous order that they have top review.	See previous order.	Display previous order which have top review.	Display previous order which have top review.	Pass	TC- 85
SRS-13.3	System will display interface according to chosen order.	Choose order: bag	Display interface.	Display interface.	Pass	TC- 86
SRS-13.4	Rating is based on five stars with one being the lowest and five being the highest. User will be able to give rating to the seller.	Quality: good	4 Stars rating.	4 Stars rating.	Pass	TC- 87
SRS-13.5	System will save the rating in database.	Rating: 4 Stars	Rating saved successfully.	Rating saved successfully.	Pass	TC- 88
SRS-13.6	User will be able to delete rating through a reset button.	Delete: rating	Display reset button.	Display reset button.	Pass	TC- 89
SRS-13.7	System will ask user are you sure you want to delete rating.	Delete: confirm	Delete feedback successfully.	Delete feedback successfully.	Pass	TC- 90
SRS-13.8	User will be able to provide one rating at a time when login from one email.	ahmed1@gmail.c om ahmed1@gmail.c om	 Provide rating. Display error message. 	 Provide rating. Display error message 	Pass	TC- 91

SRS-14.1	System shall provide user discounts on specific brand.	Specific brand: Gucci	Discount provide.	Discount provide.	Pass	TC- 92
SRS-14.2	User shall be able to view all discounts.	Specific brand: Gucci Discount: 5%	View discount successfully.	View discount successfully.	Pass	TC- 93
SRS-14.3	User shall be able to receive notification of discounts via email when they are registered.	ahmed1@gmail.com	Receive notification successfully.	Receive notification successfully.	Pass	TC- 94
SRS-14.4	If total bill of user exceeds ten thousand and above user will get discount.	Total bill: 15000	Received discount successfully.	Received discount successfully.	Pass	TC- 95
SRS-15.1	User will be able to schedule their delivery and set date, time and month after purchasing product.	Date: 25 Time: 12:00 Month: June	Schedule successfully.	Schedule successfully.	Pass	TC- 96
SRS-15.2	User will be able to change set date, time and month.	Date: 25 Time: 1:00 Month: June	Change successfully.	Change successfully.	Pass	TC- 97
SRS-15.3	User will be able to delete set date, time and month by reset button.	Click on reset button.	Delete successfully.	Delete successfully.	Pass	TC- 98
SRS-15.4	System will save user information in user's respective database.	Date: 25 Time: 1:00 Month: June	Information saved in database.	Information saved in database.	Pass	TC- 99
SRS-15.5	User can add their location for dispatching of order.	Location: I-14 Islamabad	Location added successfully.	Location added successfully.	Pass	TC- 100
SRS-15.6	System will display message your delivery is confirmed at this specific date.	Date: 25-12-2021	Confirmation message is displayed.	Confirmation message is displayed.	Pass	TC- 101
SRS-15.7	System will display interface of scheduling delivery after user select option of scheduling delivery.	Option: Schedule delivery	Interface displayed.	Interface displayed.	Pass	TC- 102
SRS-15.8	System will display calendar to user for choosing date, month and clock to select time.	 Option: date, month Option: time 	 Calendar displayed. Clock displayed. 	 Calendar displayed. Clock displayed. 	Pass	TC- 103
SRS-16.1	System will facilitate the user with daily flash sales with large discount.	Specific brand: Gucci Price range: above 5000 Discount: 30% off	Daily flash sale provided.	Daily flash sale provided.	Pass	TC- 104

SRS-16.2	User will be able view which products are selling out faster.	Rating: 4.3 Check review	View product successfully.	View product successfully.	Pass	TC- 105
SRS-16.3	System will notify users through emails, and countdown time will start when the email will be sent to user.	ahmed1@gmail.com	Notification received successfully.	Notification received successfully.	Pass	TC- 106
SRS-16.4	User will be able to view products on which daily flash sale is applicable.	Specific brand: Gucci Brand: jimmy	 Daily flash sale is applicable. Daily flash sale is not applicable. 	 Daily flash sale is applicable. Daily flash sale is not applicable. 	Pass	TC- 107
SRS-17.1	User can change system language according to their choice.	Language: Urdu	Language changed successfully.	Language changed successfully.	Pass	TC- 108
SRS-17.2	User will be able find language support option in setting and system shall display page of language support to user.	Option: language support	Display language support.	Display language support.	Pass	TC- 109
SRS-17.3	System will display options for user to choose language such as English and Urdu and user shall be able to select the particular language of their own choice.	Language: Urdu	Language choose successfully.	Language choose successfully.	Pass	TC- 110
SRS-17.4	System will ask user that are you sure you want to apply this language and will display option to user yes or no.	1. Option: yes 2. Option: no	 Language changed. Cancel. 	Language changed. Cancel.	Pass	TC- 111
SRS-17.5	Language will be applied to whole system and system language will be change accordingly.	Language: Urdu	System language changed.	System language changed.	Pass	TC- 112
SRS-17.6	User can select one language at time and can change it again and again.	Language: Urdu, English	Select any one.	Select any one.	Pass	TC- 113
SRS-18.1	User will be able to select to edit the profile.	Password: abc@123 Email id: ahmed1@gmail.com Phone number:+93 526 8569142 User name: Ahmed	Profile edit successfully.	Profile edit successfully.	Pass	TC- 114

SRS-18.2	User will be able to select privacy setting to make changes.	Password: abc@123 Email id: ahmed1@gmail.com Phone number:+93 526 8569142 User name: Ahmed	Privacy setting changed.	Privacy setting changed.	Pass	TC- 115
SRS-18.3	System will display the interface according to privacy setting.	Privacy setting: abc@123 ahmed1@gmail.com +93 526 8569142 Ahmed	Privacy setting updated.	Privacy setting updated.	Pass	TC- 116
SRS-18.4	System will provide user option to not to view the profile to everyone but only to me such a phone number, password and email.	Email id: ahmed1@gmail.com Phone number:+93 526 8569142	Display privacy setting.	Display privacy setting.	Pass	TC- 117
SRS-18.5	User will be able to select the save option.	Check: privacy	Privacy setting changed.	Privacy setting changed.	Pass	TC- 118
SRS-18.6	System will display the message that privacy setting update successfully.	ahmed1@gmail.com +93 526 8569142	Privacy setting updated.	Privacy setting updated.	Pass	TC- 119
SRS-19.1	User will be able to add profile in their account such as adding biography.	Name: Ali Phone number: +93 526 8569142 Address: I-14 Islamabad Email id: ahmed1@gmail.com	Profile added successfully.	Profile added successfully.	Pass	TC- 120
SRS-19.2	User will be able to given option of privacy to not show profile settings to anyone.	Option: private	Private profile successfully.	Private profile successfully.	Pass	TC- 121
SRS-19.3	User will be able select set up profile option from settings in app.	Option: Profile	Displayed profile.	Displayed profile.	Pass	TC- 122
SRS-19.4	User will be able to update email and contact information.	Email id: ahmed1@gmail.com Phone number: +93 526 8569142	Updated Information.	Updated Information.	Pass	TC- 123
SRS-19.5	System will save users updated information.	Email id: ahmed1@gmail.com Phone number: +93 526 8569142	Saved successfully.	Saved successfully.	Pass	TC- 124

SRS-19.6	User will be able to change profile at any time.	Name: Ali Phone number: +93 526 8569142 Address: I-14 Islamabad Email id: ahmed1@gmail.com	Changed successfully.	Changed successfully.	Pass	TC- 125
SRS-19.7	User will be able to delete profile.	Name: Ali Phone number: +93 526 8569142 Address: I-14 Islamabad Email id: ahmed1@gmail.com	Displayed message.	Displayed message.	Pass	TC- 126
SRS-19.8	User will be able to import profile photos from gallery of phone or computer.	Choose from gallery.	Choose successfully.	Choose successfully.	Pass	TC- 127
SRS-19.9	System will provide users option of using camera to upload photo.	Option: camera.	Uploaded photo.	Uploaded photo.	Pass	TC- 128
SRS-20.1	User will be able to zoom in and zoom out images of products for high visibility.	1. <u>Zoom in.</u> 2. <u>Zoom out.</u>	Zoom in successfully. Zoom out successfully.	 Zoom in successfully. Zoom out successfully. 	Pass	TC- 129
SRS-20.2	User will be able to view 3D effect of images.	Option: 3D effect.	3D effect displayed.	3D effect displayed.	Pass	TC- 130
SRS-20.3	User will be able to view all the sides of images and shall be able to zoom it.	 Option: Right. Option: left. 	 Right side viewed. Left side viewed. 	 Right side viewed. Left side viewed. 	Pass	TC- 131
SRS-20.4	System will allow user to view zoom in and zoom out images.	Option: Zoom in. Option: Zoom out.	Allowed successfully. Allowed successfully.	Allowed successfully. Allowed successfully.	Pass	TC- 132
SRS-20.5	Not only images can be zoom in from mobile but also from web browser through zoom in option provided by system.	Option: Mobile. Option: Web browser.	Allowed successfully. Allowed successfully.	Allowed successfully. Allowed successfully.	Pass	TC- 133

SRS-20.6	A plus sign would indicate image zoom in and minus would indicate zoom out.	1. Option: + 2. Option: -	Zoom in successfully. Zoom out successfully.	 Zoom in successfully. Zoom out successfully. 	Pass	TC- 134
SRS-20.7	The percentage of zoom in and zoom out images should be shown by system.	1. Percentage: 100%. 2. Percentage:- 100%.	Zoom in successfully. Zoom out successfully.	Zoom in successfully. Zoom out successfully.	Pass	TC- 135
SRS-20.8	A slider as well as button should be provided by system for zoom images.	Option: Slider.	Zoom successfully.	Zoom successfully.	Pass	TC- 136
SRS-21.1	User will be able to sell products at individual level (selling products less than 40) and at professional level (selling products more than 40).	 Sell product: 36. Sell product: 41. 	1. Display individual level product successfully. 2. Display professional level product successfully.	1. Display individual level product successfully. 2. Display professional level product successfully.	Pass	TC- 137
SRS-21.2	User will be able to enter their details in selling product form such as valid account number, government issued national ID, tax information and phone number.	Account number: 1100 5236 745896. National ID: 7896564. Tax information: 30%. Phone number: +93 526 8569142.	Form stored in database successfully.	Form stored in database successfully.	Pass	TC- 138
SRS-21.3	User will be able to delete their details in the form.	Account number: 1100 5236 745896. National ID: 7896564. Tax information: 30%. Phone number: +93 526 8569142.	Details deleted successfully.	Details deleted successfully.	Pass	TC- 139
SRS-21.4	System will verify information entered by user.	1100 5236 745896 7896564 30% +93 526 8569142.	Verify information successfully.	Verify information successfully.	Pass	TC- 140
SRS-21.5	User will be able to pay fees in application through credit card while selling a product.	Payment method: Credit card.	Paid fee successfully.	Paid fee successfully.	Pass	TC- 141

SRS-21.6	User will be able to list their product on application which includes information about product name and product description.	Product name: laptop. Product description: Color: black, blue. RAM: 8 GB. Processor: core i7. Storage: 100 GB.	Store list of product in data base successfully.	Store list of product in data base successfully.	Pass	TC- 142
SRS-22.1	System will facilitate the user that have purchased products of more than rupees fifty thousand in MFAS access to membership of prime offer.	Price: 60000.	Access membership of prime offer successfully.	Access membership of prime offer successfully.	Pass	TC- 143
SRS-22.2	User will be able to view TV shows, music's, movies, and read thousands of books.	User: prime offer member.	Access to watch TV shows, music's, movies, and read thousands of books successfully.	Access to watch TV shows, music's, movies, and read thousands of books successfully.	Pass	TC- 144
SRS-22.3	Prime membership shall provide user free two-day shipping offer.	User: prime offer member.	Provide free two- day shipping offer.	Provide free two- day shipping offer.	Pass	TC- 145
SRS-22.4	User will be able to provide feedback and rating to all TV shows, music's, movies and books.	User: prime offer member. Rating: 4.3 stars.	Feedback stored in database.	Feedback stored in database.	Pass	TC- 146
SRS-23.1	User will be able to view all the history of products they have purchased and searched.	Search product: mobile phone. Purchased product: bag.	View history of product successfully.	View history of product successfully.	Pass	TC- 147
SRS-23.2	User will be able to delete all history of products.	Product: deleted.	Display reset button.	Display reset button.	Pass	TC- 148

	System will ask user that are you sure you want to delete	Delete: confirm.	Delete successfully.	Delete successfully.	Pass	TC- 149
SRS-23.3	this product.					
SRS-23.4	System will save all the history of user according to date and time.	Date: 23 July 2021. Time: 11:40 PM.	Saved in database.	Saved in database.	Pass	TC- 150
SRS-24.1	User will be able to view all the categories of products such as sports, gaming, books and clothes, medicines etc.	Product category: book.	Display the category of product.	Display the category of product.	Pass	TC- 151
SRS-24.2	User will be able to view all the popular categories of products	Rating: 5.	Display popular category.	Display popular category.	Pass	TC- 152
SRS-24.3	User will be able to view all the discounts on new categories displayed.	Category: new. Discount: 10%.	Display discount Successfully.	Display discount Successfully.	Pass	TC- 153
SRS-24.4	User will be able to select category and system will display all the available products of that category.	Product category: book.	Display all the available product.	Display all the available product.	Pass	TC- 154
SRS-24.5	System will display all the information related to that category of product such as price, rating, type, payment method for purchasing it.	Price: 4000. Rating: 4.3. Type: book. Payment: 1. Credit card. 2. Easy paisa. 3. Cash on delivery.	Display all information of product 1. Display receipt. 2. Display receipt. 3. Display receipt.	Display all information of product 1. Display receipt. 2. Display receipt. 3. Display receipt.	Pass	TC- 155
SRS-25.1	After login user will be able to find a website on home page.	abc@123 ahmed1@gmail.com	Website displayed on homepage.	Website displayed on homepage.	Pass	TC- 156
SRS-25.2	User will be able to reach management via contact information (official number and email).	Official no: 051-000000000.	Reached Management.	Reached Management.	Pass	TC- 157

SRS-25.3	System will be given different options of help user will select any option.	Option: Reset password.	Options selected successfully.	Options selected successfully.	Pass	TC- 158
SRS-25.4	System will provide all guides to user whenever user ask for help.	Option: Reset password.	Guides: Click option. Verify email. Submit new password. Password Updated	Guides: Click option. Verify email. Submit new password. Password Updated	Pass	TC- 159
SRS-26.1	System will need to be update it will send notification email to user.	ahmed1@gmail.com	Notification email.	Notification email.	Pass	TC- 160
SRS-26.2	User will be able to receive a notification email to update system.	ahmed1@gmail.com	Email received.	Email received.	Pass	TC- 161
SRS-26.3	After receiving notification of update user will be able to click on it.	Check Notification email.	Update link available.	Update link available.	Pass	TC- 162
SRS-26.4	When user click system will take some time and update it.	Click on link.	Update Successfully.	Update successfully.	Pass	TC- 163
SRS-27.1	After login on the home page there is option of search bar.	ahmed1@gmail.com asd@123.	On homepage search bar visible.	On homepage search bar visible.	Pass	TC- 164
SRS-27.2	System will gave different search options to user.	Check search options.	Different search options visible.	Different search options visible.	Pass	TC- 165
SRS-27.3	User will be able to search products by audio.	Ask for bag in audio.	Bag details visible.	Bag details visible.	Pass	TC- 166
SRS-27.4	User will be able to search different products by category	Gucci Bag.	Brand: Gucci Product: bag Price: 12000 Color: black	Brand: Gucci Product: bag Price: 12000 Color: black	Pass	TC- 167

	or brand.					
SRS-27.5	When user search any product System will display all products related to search.	Bag.	Different bags visible with details.	Different bags visible with details.	Pass	TC- 168
SRS-28.1	System will provide travelling packages of different cities and countries with discount.	Check travelling packages.	Discounts available.	Discounts available.	Pass	TC- 169
SRS-28.2	User will be able to book travelling packages with discount.	Book turkey package.	10% discount achieved.	10% discount achieved.	Pass	TC- 170
SRS-28.3	User will be able to have entertainment through games and videos.	Play video.	Many funny videos visible.	Many funny videos visible.	Pass	TC- 171
SRS-28.4	User will be able to also option of e learning.	Start learning.	Many videos related learning visible.	Many videos related learning visible.	Pass	TC- 172
SRS-28.5	User will be able to play games and make coins.	Play game.	Avail Coins.	Avail coins.	Pass	TC- 173
SRS-29.1	User will be able to select the type of utility bill.	Option: electricity bill. Option: water bill.	 Option selected. Option selected. 	 Option selected. Option selected. 	Pass	TC- 174
SRS-29.2	System will provide multiple payment options to users for paying bill such as credit card and easy paisa.	 Option: Easy paisa. Option: Credit card. 	 Option selected. Option selected. 	 Option selected. Option selected. 	Pass	TC- 175
SRS-29.3	User will be able to choose one option and system will display relevant interface of that payment method.	Option: Easy paisa.	Interface displayed.	Interface displayed.	Pass	TC- 176

SRS-29.4	User will be able to enter account number in any of the payment method and submit it to system.	Account number: 1100 5236 745896.	Submit successfully.	Submit successfully.	Pass	TC- 177
SRS-29.5	System will validate details entered by user and display message payment successfully done.	 Account number: 1100 5236 745896. Account number: 1100 6 5286. 	 Payment successfully done. Invalid. 	Payment successfully done. Invalid.	Pass	TC- 178
SRS-29.6	User will be able to remove option of bill and select another one.	Option: Gas bill.	Changed successfully.	Changed successfully.	Pass	TC- 179
SRS-29.7	User will upload image of particular bill for verification by system.	Upload image.	Verified successfully.	Verified successfully.	Pass	TC- 180
SRS-30.1	System will facilitate the user with mobile recharge option.	Option: recharge.	Display recharge option.	Display recharge option.	Pass	TC- 181
SRS-30.2	User will be able to add their phone number.	 Phone number: +92 369 8523691. Phone number: +92 369 8523. 	 Add successfully. Display invalid message. 	 Add successfully. Display invalid message. 	Pass	TC- 182
SRS-30.3	System will provide option to user to select their package to load.	 Package: data. Package: call. Package: message. 	 Select data package successfully. Select call package successfully. Select message package successfully. 	 Select data package successfully. Select call package successfully. Select message package successfully. 	Pass	TC- 183
SRS-30.4	System will facilitate the user to choose preferred payment method.	Payment: 1. Credit card. 2. Easy paisa.	Display bill receipt. Display bill receipt.	Display bill receipt. Display bill receipt.	Pass	TC- 184
SRS-30.5	System will display the confirmation message on user's number that package has been loaded successfully.	+92 369 8523691.	Display confirmation message successfully.	Display confirmation message successfully.	Pass	TC- 185
SRS-31.1	User will be able to add products in shopping list.	Product: Name: Bag. Color: black. Size: medium.	Added successfully.	Added successfully.	Pass	TC- 186

SRS-31.2	System will show shopping list to user.	Product: Name: Bag. Color: black. Size: medium.	Show successfully.	Show successfully.	Pass	TC- 187
SRS-31.3	User will be able to delete products from shopping list from reset button.	Click on reset button.	Delete successfully.	Delete successfully.	Pass	TC- 188
SRS-32.1	User will be able to create advertisement for their product for free on app to sell it faster.	Option: Advertisement.	Advertisement created.	Advertisement created.	Pass	TC- 189
SRS-32.2	User will be able to post their advertisement on app.	Option: Post advertisement.	Posted successfully.	Posted successfully.	Pass	TC- 190
SRS-32.3	User will be able to create multiple advertisements on app.	 Advertisement: single. Advertisement: multiple. 	Created successfully. Created Successfully.	 Created successfully. Created Successfully. 	Pass	TC- 191
SRS-32.4	User will be able provide information about advertisement such as product category, name, image of product, contact information and an attractive title for advertisement.	Product category: Fashion. Product name: bag. Image product: 3. Contact: +96 852 9332584. Attractive title: "Fashion is necessary".	Information provided.	Information provided.	Pass	TC- 192
SRS-32.5	User will be able to select category of product to post its advertisement.	Option: Fashion.	Option selected.	Option selected.	Pass	TC- 193
SRS-32.6	System will display message advertisement posted successfully.	Message.	Posted successfully.	Posted successfully.	Pass	TC- 194
SRS-32.7	This step is optional for users while selling products.	Advertisement: optional.	Optional step.	Optional step.	Pass	TC- 195
SRS-33.1	User shall be able to search the product by entering its name, brand or any category and it will be saved by system.	Name: Bag. Brand: Gucci. Category: Fashion.	Searched successfully and saved in database.	Searched successfully and saved in database.	Pass	TC- 196
SRS-33.2	When user will search again products will be recommended to user based upon their previous search.	Name: Watch. Brand: Rolex. Category: Fashion.	Recommended previous search.	Recommended previous search.	Pass	TC- 197
SRS-33.3	User shall be able to delete all the history of previous searches by reset button.	Click on reset button.	Delete successfully.	Delete successfully.	Pass	TC- 198

SRS-33.4	System will ask user are you sure you want to delete all history and system shall display user an option to choose yes or no.	 Option: yes. Option: no. 	 Deleted successfully. Cancel. 	 Deleted successfully. Cancel. 	Pass	TC- 199
SRS-33.5	User shall be able to select the products of their previous search.	Select: previous product.	Previous product selected.	Previous product selected.	Pass	TC- 200
SRS-34.1	Admin shall be able to add .multiple stocks in system.	Option: Multiple stocks.	Multiple stock added successfully.	Multiple stock added successfully.	Pass	TC- 201
SRS-34.2	If stock is not available admin will contact seller for more stock and update it to system accordingly.	Stock: Not available.	Added more stock and update.	Added more stock and update.	Pass	TC- 202
SRS-34.3	Admin will remove stock from system.	Stock: remove.	Remove Stock.	Remove stock.	Pass	TC- 203
SRS-34.4	System will ask admin that are you sure you want to remove stock.	Message.	Removed successfully.	Removed successfully.	Pass	TC- 204
SRS-34.5	System will save stock in database of admin.	Stock: save.	Saved stock.	Saved stock.	Pass	TC- 205
SRS-35.1	System will display green color of progress bar when user has completed 1 step of purchasing product otherwise color will remain white of progress bar.	1. Step: 1. 2. Step: 0.	 Green color is displayed. White color is displayed. 	 Green color is displayed. White color is displayed. 	Pass	TC- 206
SRS-35.2	When User will be able to purchase product. System will show numbering on progress bar.	Purchase product: bag.	Numbering show in progress bar.	Numbering show in progress bar.	Pass	TC- 207
SRS-35.3	System will display message that user has completed their order when progress bar is 100 % completed.	Bar: 100 %.	Message displayed successfully.	Message displayed successfully.	Pass	TC- 208
SRS-36.1	User will be able to view the yearly data of all the orders.	Option: view.	Yearly data viewed.	Yearly data viewed.	Pass	TC- 209
SRS-36.2	User will be able to delete product the yearly data of all the orders.	Option: Delete.	Deleted successfully.	Deleted successfully.	Pass	TC- 210

SRS-36.3	User will be able to search product the yearly data of all the orders.	Product: Bag.	Searched successfully.	Searched successfully.	Pass	TC- 211
SRS-36.4	System will display date and time when user has ordered product.	Date: 25. Time: 12:00.	Displayed date and time.	Displayed date and time.	Pass	TC- 212
SRS-36.5	System will display which product has sale the most in that year.	Rating: 5.	Display the product.	Display the product.	Pass	TC- 213
SRS-36.6	User shall be able to reset orders in ascending and descending order with respect to price.	Click on reset button.	Change in ascending or descending order according to price.	Change in ascending or descending order according to price.	Pass	TC- 214
SRS-37.1	User will be able to add new product.	Product: Bag.	Added product.	Added product.	Pass	TC- 215
SRS-37.2	System will display all the products list which user has entered before in shopping list.	Product category: Fashion. Product Name: Glasses. Product size: medium. Product quality: good. Product color: black.	Displayed all product list.	Displayed all product list.	Pass	TC- 216
SRS-37.3	User shall be able to change product name in shopping cart.	Product name: pen.	Changed successfully.	Changed successfully.	Pass	TC- 217
SRS-37.4	When user will enter product in shopping list system shall display user all the images of products and their information.	Product: pen.	Product category: Fashion. Product Name: Glasses. Product size: medium. Product quality: good. Product color: black Displayed image.	Product category: Fashion. Product Name: Glasses. Product size: medium. Product quality: good. Product color: black Displayed image.	Pass	TC- 218

Artifact-7 Supplementary Specification Document

Table of Contents

1. INTRODUCTION	
1.1. Purpose	127
1.2. SCOPE	127
1.3. DEFINITIONS, ACRONYMS, AND ABBREVIA	ATIONS
1.3.1. Acronyms:	
•	
1.5. OVERVIEW	129
2. USABILITY	129
2.1. OPERABILITY	
2.2. Learnability	
2.3. USER INTERFACE	
3. RELIABILITY	130
3.1. ROBUSTNESS	
3.2. AVAILABILITY	
3.3. ACCURACY	
4. PERFORMANCE	131
4.1. RESPONSE TIME	
4.2. CAPACITY	
C-2. System product	
5. SUPPORTABILITY	132
5.1. SOFTWARE SUPPORT	
5.2. MAINTENANCE:	
6. DESIGN CONSTRAINTS	133
6.1. Software Language	
6.2. DESIGN TOOL	
6.3. CLASS LIBRARIES	
6.4. DEVELOPMENT TOOL	
LESSON LEARNED:	133
CONCLUSION:	133
REFERENCE AND RIRI IOCRAPHY	13/

1. Introduction

The Supplementary Specification (SSD) document provides an overview of MFAS OSS features and its requirements. The document also aims to describe the functionality and external interfaces of system. Furthermore the document is divided into number of sections separating the non-functional requirements into different parts. It also gives an in-depth insight of quality attributes and design constraints of system which is considered when designing a system.

1.1. Purpose

The purpose of SSD is to provide a detailed overview of our software product, its parameters and goals. The SSD emphasizes on the major part that have not been described in use case model such as hardware, software and non functional requirements which affect the quality of system. In addition to this, the document focuses on project target audience as well as it highlights user interfaces, performance, quality assurance requirements.

1.2. Scope

The SSD captures all of requirements into a single document. The MFAS OSS that is to be developed aids in providing user opportunities of purchasing, selling products and services from an extensive number of online shopping sites available on the web. Salient features of system are as follows,

- Users can purchase multiple products and can pay, through multiple payment options provided to them.
- System provides login facility to user.
- User can manage their account settings such as changing phone number and email whenever needed.
- User is notified about the latest updates related to online shopping such as sales and discounts.[1]

The features described here meet all the needs of user and all the features described in the document are being implemented in the system.

1.3. Definitions, Acronyms, and Abbreviations

1.3.1. Acronyms:

OSS- Online Shopping System

SSD-Supplementary Specification document

IDE-Integrated Development Environment

1.3.2. Definitions:

Supplementary Specification document

Supplementary specification document captures all system requirements, nonfunctional requirements as well as design constraints.

IDE:

An integrated development environment is a software program that provides comprehensive resources to computer programmers to develop software.

Java NetBeans:

It is an IDE that helps enables to develop desktop and web applications.

1.4. References

The relevant citation includes,

- Madhurima Chatterji and Swagata Gosh, Online Fashion Store, 2nd November 2015
 <u>https://www.academia.edu/29499527/SOFTWARE_REQUIREMENT_SPECIFICATION_FOR_ON_LINE_FASHION_STORE</u>
- Andrew Blossom, E-Commerce System,2007 https://www.cse.msu.edu/~chengb/RE-491/Papers/SRS-BECS-2007.pdf

1.5. Overview

The SSD not only provides a detailed explanation of the system but also highlights features and non-functional requirements that ensure usability and effectiveness of system.

Section 2: This section explains in detail usability as a non-functional requirement which includes user's effort in understanding and learning software application with respect to time and knowledge.

Section 3: This section elaborates in detail the probability of software executing, without failure for a specific period. It further includes accuracy and availability that how accurately system will work and will be available for users.

Section 4: This section describes performance as a non-functional requirement which represents responsiveness of system to various user actions in terms of time duration taken by system to respond.

Section 5: Supportability includes that system will operate on which type of applications and supported by which type of browsers.

Section 6: This last section delineates design constraints and provides information about design tools as well as development tools used for development of software system.

2. Usability

2.1. Operability

OPR.1.90% of the un-trained registered customers will be able to place order of products within 10 minutes after understanding the system.

OPR.2. Trained admin will be able to manage all the system and manage customer's record within 10 minutes and on average 5 minutes.

OPR.3. 40% of the registered customers will take 20 minutes to understand the different payment modes.

OPR.4. 95% of users (registered customers, visitors) will take 15 minutes to provide feedback and rating to the system after fully understanding the system.

OPR.5. 50% of the users (registered customers, visitors) will make error to search products by image and by voice.

2.2. Learnability

- **LEARN 1.** System shall provide users opportunity of multiple language support so that they understand the functionality of system.
- **LEARN 2.** Beginners who use system for the first time shall be able to understand system after watching video of working of system of 10 minutes.

2.3. User Interface

- **UI.1.** All the text fields of login and password shall be displayed on login page.
- **UI.2.** All the products and their categories shall be displayed on homepage.

3. Reliability

REL.1. MFAS is 98% reliable for 6 months i.e., under normal conditions there is 98% chance that the system will not fail in 6 months. MTBF

3.1. Robustness

- **ROB.1.** While searching for product, if user enters incorrect name than the system will display an error message and will allow the user to enter the name again.
- **ROB.2.** When user will login and enter their email and password, if they will enter incorrect email and/or password system shall give 3 attempts to user after that they will contact admin.

3.2. Availability

- **AVBL.1.** Customers shall be accessing the system 24 hours a day, 7 days a week.
- **AVBL.2.** Customer shall be able to place order anytime.
- **AVBL.3.** Customer shall be able to send feedback anytime.
- **AVBL.4.** All system activities i.e., registration, manage cart, feedback and complaints registration must be available 24 hours a day, 7 days a week.
- **AVBL.5.** Home delivery shall be available for customers 7 days a week.
- **AVBL.6.** The system will display a message if there would be any downtime in system.

3.3. Accuracy

- **ACC.1.** Users will be able to pay through different payment options available to them with 100% accuracy.
- **ACC.2.** The system will be able to calculate bill with 100% accuracy and generate receipt.
- **ACC.3.** After bill calculation, the system shall be able to provide discounts on some products.
- **ACC.4.** After customer feedback, the system shall be able to update system according to customer needs.

4. Performance

4.1. Response Time

- **PERF-1.** The system should response in 10 to 20 seconds minimum when a customer will enter their username or password for login.
- **PERF-2**. The system should show an error message in 3 seconds when customer will enter wrong password.
- **PERF-3.** Customer requests for changing password should be accepted within 2 seconds.
- **PERF-4.** System should send verification email to customer for password change within 5 seconds.
- **PERF-5.** System should display all products in 1 second when customer searches for any product.
- **PERF-6**. When a customer proceeds for payment, the system should show multiple payment options in 5 seconds.
- **PERF-7**. The system should show a description of a product in 2 seconds when user will purchase a product.
- **PERF-8**. When a customer chats with seller, the system should notify admin within 10 second to answer customer queries.
- **PERF-9**. System should add product to cart in 3 second when customer will click on add to cart option.

- **PERF-10.** The system should show error message in 2 second when user search for product which is not available in stock.
- **PERF-11**. The system should send notifications on customer email within 30 seconds when any new category of product is added in system.
- **PERF-12**. The system should send notifications on customer email within 40 seconds when any brand voucher or flash sales will be offered by system.
- **PERF-13**. When a customer will ask for monthly shopping report, system should respond in 60.
- **PERF-14.** When customer will manage cart (i.e., add, delete products in cart), the system should update changes in cart within 9 seconds.
- **PERF-15.** The system should generate bills within 50 sec when the customer will proceed for payment.

4.2. Capacity

- C-1. The system is capable of handling 250 users at a time.
- C-2. Product images will be saved in database having 524KTbytes.

5. Supportability

5.1. Software support

- **SUP.1.** MFAS OSS will operate in multiple operating systems i.e., Microsoft Windows, Google's Android OS, Apple iOS and Linux.
- **SUP.2.** MFAS OSS will be supported by several browsers i.e., Chrome, Firefox, Microsoft Edge, and Internet explorer.

5.2. Maintenance:

MAINT.1. The system shall be maintained by experts with maximum experience of 3 years

who would be able to modify system according to user needs.

MAINT.2. The maintenance of the system shall be done as per the maintenance contract.

6. Design Constraints

6.1. Software Language

MFAS OSS will be implemented by using Java programming language.

6.2. Design tool

Proto.io, Marvel and Adobe XD will be used for user interface designing of MFAS.

6.3. Class libraries

System will use existing Java libraries for JSP and Servlets. Also we need to develop some new libraries for MFAS OSS web based application.

6.4. Development tool

The implementation tool of for building MFAS OSS will include Java Development Toolkit working with Java NetBeans IDE 12.3.

Lesson Learned:

In this project we learn time management, cooperation with team. We learn many things face to face it's good that we are not online. We also communicate with group members through what's app and zoom meeting. It is not necessary to wait till the project is completed before learning takes place. At any stage during the project, lessons can be learned.

Conclusion:

Our project is on MFAS-An Online Shopping System is mainly designed to provide user ease of purchasing product without any load on website and can search variety of products using tools.

This system enables the user to buy goods, services, and other items through the internet without using an immediate provider. The user can pay for the item or service by using multiple payment options provided to users using a credit or debit card. Admin can also manage stock and help answer user queries in chats. In our online shopping system users will also receive a yearly report detailing all their MFAS.com orders from the previous year, as well as daily and weekly shop summaries and a shopping list.

In the next version we will add more features such as a progress bar and recommended products to the shopping list for more developed system.

Reference and Bibliography

The felicitous citation includes:

- [1]. John, "Supplementary Specification", 1st January https://www.slideshare.net/Kkushum/online-shopping-system-69945887
- [2]. Trio, "vision document", 15 June
 http://repository.petra.ac.id/18964/1/Publikasi1_04045_6772.pdf
- [3]. Sam, "activity diagram", 8 July https://www.uml-diagrams.org/activity-diagrams-reference.html
- [4]. David, "test cases", 15 December

 $\underline{https://www.ibm.com/docs/SSYMRC_6.0.4/com.ibm.rational.test.qm.doc/topics/r_testcase_template_ref.html$